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ABSTRACT

This study reports the comparative increase in enrollments at each level of education in all 22 member countries of the Organisation for Economic Cooperation and Development between 1950 and 1965. Data are also included for Yugoslavia, an associated member country. The first two chapters deal with enrollment trend analysis -- chapter one being concerned with total enrollments and chapter two with each educational level separately; while chapter three is concentrated more particularly on the incidence of demographic factors on the rise in enrollments. In chapter four, the authors endeavor to extrapolate the trends observed during the period studied up to 1980. The main conclusions drawn from the study are presented in the final chapter. The statistical material used for determining enrollment trends, an examination of the structure of each country's system (together with the changes that have been made since 1950), and certain technical details concerning the extrapolation of the trends observed in chapter four are provided in three annexes to the document. Related documents are ED 057 470, EA 004 323, and EA 004 421-425. (Author/JH)

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Background Study No. 1

EDUCATIONAL EXPANSION IN THE O.E.C.D. COUNTRIES
SINCE 1950

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EDUCATIONAL EXPANSION IN THE O.E.C.D. COUNTRIES SINCE 1950

Summary

Between 1950 and 1965, school and university enrolments in all Member countries combined rose from 101 million to 152 million, i.e. a 50 per cent increase, while at the same time the population aged 5 to 24 rose by only 23 per cent.

Furthermore, some 22 per cent of the total population was at school or university in 1965.

This increase in enrolments was greater in absolute figures in secondary education than in primary education for roughly half of these countries.

The structure of the educational pyramid has consequently changed; primary school enrolments have gone down relatively to the benefit of enrolments at other levels. Higher education enrolments in particular accounted for more than 4 per cent of the total for over half of the countries in 1965, whereas in 1950 only the United States exceeded this proportion.

Relatively speaking, primary school enrolments have had the slowest increase. In seven countries, secondary school enrolments went up more quickly than those in higher education (France, Iceland, Norway, Spain, Italy, Portugal and Turkey). In the other 16 countries, higher education increased more quickly. At the same time, the increase in higher education gained pace at the end of the period, while it tended rather to slow down at the other levels.

Enrolment growth indices between 1950 and 1965

(1950 = 100)

	1st level	2nd level	3rd level	Total
Common market	113	201	234	137
Other European countries	113	166	249	131
Developing countries	158	293	288	177
North America	162	206	248	176
Japan	96	152	271	121
Total	132	187	250	150

Source: Table II.

Enrolments in 1950 and 1965 (millions)

	1st level	2nd level	3rd level	Total *
	1950	1965	1950	1965
Common Market	19.5	22.1	5.8	11.6
Other European countries	8.6	9.7	3.3	5.5
Developing countries	7.9	12.4	1.1	3.2
North America	25.2	40.8	6.9	14.2
Japan	11.4	10.9	7.3	11.0
Total	72.6	95.9	24.4	45.6

* Including enrolments not divided between the various levels (e.g. special education).

Source: Table II.

The following may be observed at each of the three levels:

- (a) pre-school education enrolments increased more quickly than primary;
- (b) at the second level, technical education increased more or less quickly than general education according to the country, although there was no dominant trend;
- (c) non-university education generally developed more quickly than university education.

Within the latter, medical studies showed the lowest rise and the science disciplines increased more or less quickly than the others according to the country, although no distinct trend can be made out here either.

The percentage of girls enrolled in secondary education has risen everywhere since 1950 and was over 40 per cent in 1965 in almost all countries. However, there are fewer girls in technical than in general education and many more in teacher training.

In higher education, a preponderance of young men is still very marked in spite of an appreciable fall in this disproportion since 1950.

The increase in the age-groups concerned by education has been irregular, especially as regards the first and second levels. This was because the birthrate was very much disturbed between 1940 and 1950 in many countries. This disturbance affected primary education right at the beginning of the period studied, and secondary education towards 1955. Higher education, on the other hand, was hardly affected before 1965.

Population growth is the main explanation for the increase in primary school enrolments. It also partly explains the increase in secondary education but less than the level of enrolments already reached in 1950. In higher education, it looks as though the rise in the number of students has been independent of population growth and the level of enrolments at the beginning of the period.

Although there is not necessarily any link from cause to effect, the increase in higher education observed in many countries has been all the more rapid as that of the age-groups concerned has been slower.

If trends during the period 1950-1965 are extended into the future, complete enrolment of the 5-19 age-group should be practically achieved in several Member countries in 1980.

Note: Unless specified to the contrary, primary education, or education at the first level, should be understood to mean pre-school plus primary education stricto sensu.

EDUCATIONAL EXPANSION IN THE O.E.C.D. COUNTRIES SINCE 1950

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EDUCATIONAL EXPANSION IN THE O.E.C.D. COUNTRIES SINCE 1950

INTRODUCTION

1. The following report is a study on the comparative increase in enrolments at each level of education in all 22 Member countries and Yugoslavia, an associated Member country, between 1950 and 1965.
2. The first Chapter briefly analyses the trend in total enrolments. Chapter II analyses each level of education separately and Chapter III concentrates more particularly on the incidence of demographic factors on the rise in enrolments. Chapter IV endeavours to extrapolate the trends observed during the period studied up to 1980. The last Chapter draws the main conclusions from the study.
3. The internal analysis of each level of education in Chapters II and III has been reduced to a minimum since it has been gone into in greater detail in other Secretariat publications (1).
4. The statistical material used is assembled in Annex I. Annex II examines the structure of each country's system, together with the changes that have been made since 1950. It is recommended that these Annexes be read first for complete understanding of the figures given in the tables that follow.
5. Annex III gives certain technical details concerning the extrapolation of the trends observed in Chapter IV.

(1) See Development of Secondary Education, Trends and Implications, O.M.C.D., 1969. A study on higher education is at present being carried out in the context of the "Statistical Survey on the quantitative development of higher education".

CHAPTER ITREND OF TOTAL ENROLMENTS BETWEEN 1950 AND 1965

6. Between 1950 and 1965, the school and university population in all 22 Member countries plus Yugoslavia rose from 10.1 million to 15.2 million (1), i.e. a 50 per cent increase (an average of 2.7 per cent per year) (see Table I). However, this increase varied a great deal from one country to another, since on the basis of 100 in 1950 the index ranged 15 years later between 106 for Germany and 266 for Turkey (see Graph I).

7. This rise in enrolments is first explained by demographic changes. Member countries' total population rose by only 1.2 per cent per year, from 571 million in 1950 to 686 million in 1965. At that time, therefore, some 22 per cent of the total population was at school or university, as opposed to 18 per cent 15 years earlier.

8. Taking only the population aged between 5 and 24, which are approximately the age-limits of formal schooling, it would seem that two-thirds of this population attended school or university in 1965 as against a little over half at the beginning of the period. The school population therefore increased more quickly than the population of school age, although the correlation between the growth indices of each is quite high as Graph II shows ($r = + 0.68$).

9. This same graph also shows, however, that population growth cannot alone explain the rise in enrolments, since for an increase of less than 10 per cent in the 5-24 age-group there are 9 countries where the rise in enrolments is between 6 per cent (Germany) and 74 per cent (Yugoslavia).

It is to be assumed that enrolments increased all the more quickly as the level of school attendance already achieved in 1950 was lower. The y-axis in Graph III takes the growth index of enrolments from the preceding graph; the enrolment ratio in 1950 on the x-axis is the percentage ratio between the school population and the population aged 5 to 24. On this assumption, the liaison between the two indices is slightly negative ($r = - 0.48$).

10. The increase in enrolments is therefore not only linked with population growth but also with the previous level of enrolments. This intuitively quite obvious conclusion has no great significance in itself, but it is nonetheless interesting to note that the combined effect of these two variables considerably raises the correlation with the index of increase in enrolments ($R = 0.91$).

(1) These figures do not in principle include part-time secondary school pupils (except for Germany and Austria). Higher education, on the other hand, includes part-time students. For further details, see Annexes I and II.

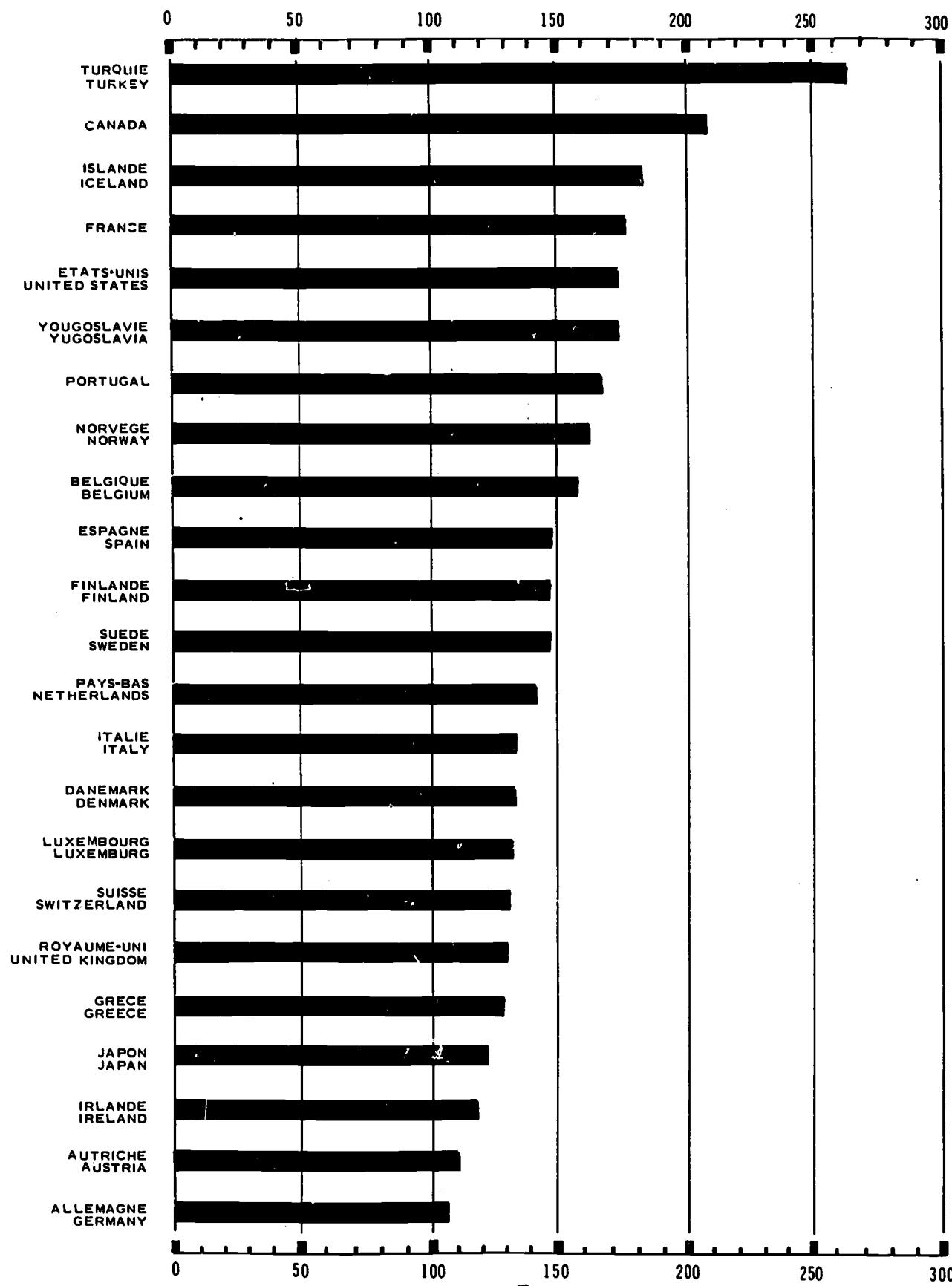
- Enrolments in thousands
- Index : 100 in 1950

TABLE I - Enrolments, total population and population aged 5 to 24,
in 1950 and 1965

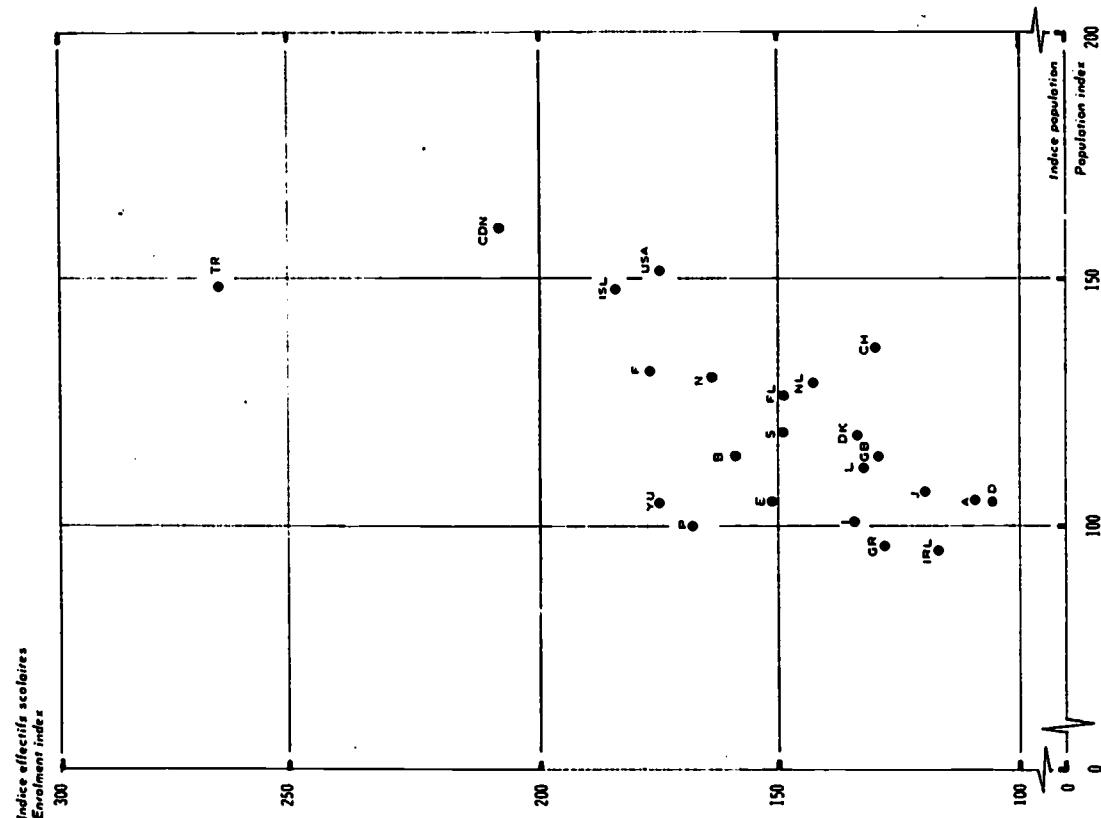
	Enrolments			Total Population			Population aged 5-24			Total Enrolments			Aged 5-24 enrolled	
	1950	1965	Index 1965/1950	1950	1965	Index 1965/1950	1950	1965	Index 1965/1950	1950	1965	%	1950	1965
GERMANY	9.188	9.722	106	49.986	59.041	118	15.446	16.160	105	18.4	16.5	59.5	60.2	58.8
AUSTRIA	1.123	1.232	110	6.935	7.255	105	1.993	2.097	105	16.2	17.0	56.3	58.3	58.9
BELGIUM	1.361	2.158	159	8.659	9.464	110	2.391	2.736	114	15.8	22.8	56.9	56.9	78.9
FRANCE	6.360	11.201	176	41.336	48.922	117	11.580	15.122	131	15.2	22.9	54.9	54.9	74.1
LUXEMBOURG	(42)	(56)	133	296	331	112	83	93	112	14.2	16.9	50.8	50.8	60.2
NETHERLANDS	2.200	3.146	143	10.114	12.292	122	3.368	4.346	129	21.8	25.6	65.3	65.3	72.4
SWITZERLAND	(1.001)	(28.516)	136	4.684	5.945	127	1.377	1.866	116	16.3	16.8	55.6	55.6	53.1
TOTAL	21.039	31.039	136	122.400	143.250	117	36.238	42.420	117	17.2	19.9	56.1	56.1	67.2
DENMARK	671	901	134	4.271	4.758	111	1.297	1.530	118	15.7	18.9	51.7	51.7	58.9
FINLAND	625	933	149	4.009	4.612	115	1.305	1.694	126	15.6	18.9	51.7	51.7	55.1
IRELAND	(620)	730	118	2.969	2.855	96	0.983	0.938	95	20.9	25.6	63.5	63.5	77.8
ICELAND	(25)	(424)	184	1.433	1.192	124	0.551	0.575	148	17.5	24.0	49.0	49.0	61.3
NORWAY	7.320	9.592	163	3.265	3.723	114	0.944	1.185	130	13.0	18.6	58.4	58.4	62.9
UNITED KINGDOM	7.320	9.592	130	50.616	54.595	108	13.858	15.820	114	14.5	17.4	52.9	52.9	60.1
SWEDEN	833	1.238	149	7.014	7.734	110	1.917	2.284	119	11.9	16.0	43.5	43.5	54.2
TOTAL	10.518	14.052	134	72.287	78.469	109	20.335	23.526	116	14.6	17.9	51.7	51.7	59.7
SPAIN	3.246	4.888	151	27.868	31.604	113	10.121	10.602	105	11.6	15.5	32.1	32.1	46.1
GREECE	(1.185)	(1.326)	129	7.554	8.538	113	2.889	2.761	96	15.7	17.9	55.3	55.3	55.3
ITALY	6.927	9.321	135	46.769	61.575	110	16.012	16.146	101	14.8	18.1	43.2	43.2	57.7
PORTUGAL	755	1.263	167	8.405	9.234	110	3.171	3.174	100	9.0	13.7	39.8	39.8	39.8
TURKEY	1.784	4.754	266	20.967	32.005	153	9.260	13.762	148	8.5	14.9	19.2	19.2	34.5
YUGOSLAVIA	2.703	3.824	174	16.346	19.511	119	6.588	6.848	104	13.5	19.6	33.4	33.4	55.8
TOTAL	16.100	25.576	159	127.889	132.467	119	48.091	53.293	111	12.6	16.8	33.5	33.5	48.0
CANADA	2.605	3.453	209	13.337	19.604	143	4.632	7.410	160	19.0	27.8	56.4	56.4	73.6
UNITED STATES	31.907	55.322	174	152.271	194.572	128	46.418	70.194	151	21.0	28.5	68.7	68.7	79.0
TOTAL	34.512	60.875	176	166.008	214.176	129	51.040	77.604	152	20.6	28.4	67.6	67.6	78.4
JAPAN	19.101	23.083	121	82.900	97.960	118	34.516	37.055	107	23.0	23.6	55.3	55.3	62.3
GRAND TOTAL	101.270	152.102	150	571.484	636.322	120	190.220	233.898	123	17.7	22.2	53.2	53.2	65.0

Source : - Enrolments : Annex I, Table VIII; enrolments between brackets are estimates based on the UNESCO Statistical Yearbook, 1963 edition.
- Population : Annex I, Tables I and II; Tables V and VI.

Graphique I - Graph I
ACCROISSEMENT DES EFFECTIFS SCOLARISES DE 1950 A 1965
 (Base 100 en 1950)
INCREASE IN SCHOOL ENROLMENTS BETWEEN 1950 AND 1965
 (1950 = 100)

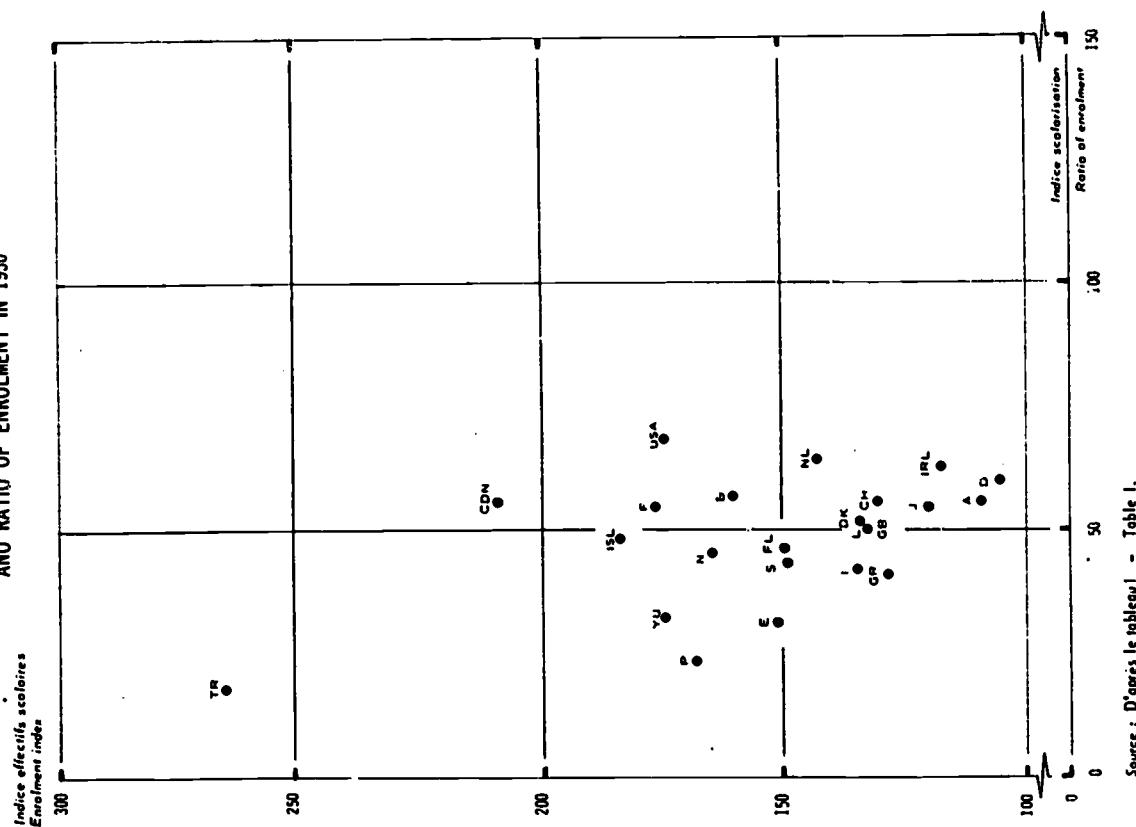


Graphique II - Graph II
ACCROISSEMENT DES EFFECTIFS SCOLARISES ET DE LA POPULATION
AGEE DE 5 A 24 ANS ENTRE 1950 ET 1965
(Base 100 en 1950)
INCREASE IN SCHOOL ENROLMENTS AND INCREASE IN POPULATION
AGED 5 TO 24, BETWEEN 1950 AND 1965
(1950 = 100)



Source : Tableau I - Table I.

Graphique III - Graph III
ACCROISSEMENT DES EFFECTIFS SCOLARISES ENTRE 1950 ET 1965
ET INDICE DE SCOLARISATION EN 1950
INCREASE IN SCHOOL ENROLMENTS BETWEEN 1950 AND 1965
AND RATIO OF ENROLMENT IN 1950



Source : D'après le tableau I - Table I.

Another way of presenting the matter is to assume that the previous level of enrolments is constant, so that the correlation between the index of increase in enrolments and the index of population growth rises from + 0.68 to + 0.88 (1).

11. This brief review has brought us incidentally in sight of some of the topics expounded later in the present study:

- (a) Does the preponderant influence of demographic factors persist when passing on from an overall study of the rise in enrolments to the study of the increase at each level? One might suspect on the face of it that this is not so since primary education - which carries great weight in total enrolments - depends almost exclusively on demographic factors because of compulsory school attendance, while this is no longer the case for secondary education and still less for higher education.
- (b) In addition, the exact measurement of the progress in enrolments assumes a precise assessment of the effect of population growth and this raises one or two delicate problems. Returning for a moment to Table I, one can see that in the case of Germany, for example, the proportion of the population attending school or university between 1950 and 1965 falls as compared with total population but rises as compared with the population aged 5 to 24. In Switzerland, on the other hand, the results are reversed. No hasty conclusions should therefore be drawn, and we shall consider these problems in greater detail in Chapter III.

(1) This is so because the liaison between the index of population growth and the ratio of enrolments in 1950 is not very strong ($r = + 0.17$). Each variable then combines with the other, almost independently. Thus, on the basis of a known formula, we have:

$$R^2 = \frac{(-0.48)^2 + (0.68)^2 - (2)(-0.48)(0.68)(0.17)}{1 - (0.17)^2} = 0.8277 = (0.91)^2$$

and again:

$$\frac{\overline{0.68} - (-0.48)(0.17)}{\sqrt{1 - (-0.48)^2}/\sqrt{1 - (0.17)^2}}^2 = 0.7761 = (0.88)^2$$

- Enrolments : in thousands
- Index : 100 in 1950

TABLE II - Enrolments at each level of education, in 1950 and 1965

	1st level			2nd level			3rd level			Total enrolments		
	1950	1965	Index 1965/1950	1950	1965	Index 1965/1950	1950	1965	Index 1965/1950	1950	1965	Index 1965/1950
GERMANY	6.314	5.607	89	2.649	3.565	135	135	168	273	9.188	9.722	106
AUSTRIA	920	868	94	1.71	2.93	21,0	21,0	48,8	232	1.123	1.232	110
BELGIUM	967	1.432	148	3.64	3.249	176	176	84,4	279	1.361	1.258	159
FRANCE	5.036	7.302	145	1.099	1.120	296	187	524	280	6.360	11.201	176
LUXEMBOURG	32,5	343,0	132	49,8	560	135	(0,1)	(0,6)	600	(42,0)	(56,0)	133
NETHERLANDS	1.557	1.860	119	1.116	(270)	151	196	49,8	124	24,9	3146	143
SILVERLAND	(476)	(552)					19,1	40,9	214	(765)	(1.001)	131
TOTAL	15.303	17.664	115	5.122	9.269	181	442	1.191	269	21.039	28.516	136
DENMARK	443	573	129	207	276	133	20,6	52,0	252	671	901	134
FINLAND	489	544	111	123	347	282	12,0	40,9	341	625	933	149
ICELAND	462	495	107	149	218	146	(9,0)	17,1	190	(620)	730	118
ICELAND	(15,3)	(27,0)					(1,5)	(0,6)	(1,1)		(46,0)	184
HUNGARY	320	412	129	90,0	248	276	(14,0)	28,9	206	(424)	692	163
UNITED KINGDOM	4.829	5.356	111	2.152	3.450	160	180	432	240	7.320	9.512	130
SUDAN	651	878	135	161	262	175	21,0	77,6	370	833	1.238	149
TOTAL	7.209	8.285	115	2.891	4.839	167	257	650	253	10.518	14.052	134
SPAIN	2.793	3.624	130	376	1.108	295	77,4	156	202	3.246	4.888	151
GREECE	953	1.004	105	(216)	(456)	211	16,0	66,0	413	(1.165)	(1.526)	129
ITALY	5.572	5.856	105	1.114	3.060	275	24,1	405	168	6.321	9.321	135
ICELAND	645	904	140	89,9	316	352	15,5	36,0	232	755	1.263	167
TURKEY	1.617	3.924	243	143	730	510	24,0	98,7	411	1.784	4.754	266
YUGOSLAVIA	1.854	2.984	161	275	614	223	55,0	185	336	2.203	3.824	174
TOTAL	13.434	18.296	136	2.214	6.284	284	429	947	221	16.100	25.576	155
CANADA	2.140	3.922	183	382	1.205	315	83,0	326	193	2.605	5.453	209
UNITED STATES	23.084	36.852	160	6.526	13.060	199	2.297	5.570	242	31.907	55.422	174
TOTAL	25.224	40.774	162	6.908	14.205	206	2.380	5.896	248	34.512	60.875	176
JAPAN	11.416	10.914	96	7.268	11.040	152	400	1.085	271	19.101	23.083	121
GRAND TOTAL	72.586	95.933	132	24.403	45.637	187	3.908	9.769	250	101.270	152.102	150

Source : Table I - Total enrolments include those which are divided between the three levels.

CHAPTER IICOMPARATIVE TREND OF ENROLMENTS AT EACH LEVEL OF EDUCATIONA. Absolute rise in enrolments

12. Table II shows the trend of enrolments between 1950 and 1965 by level of education. In primary education, enrolments fell in Germany, Austria and Japan; they rose in all other countries. At the same time, enrolments at the second and third levels increased everywhere.

13. Apart from Germany, Austria and Japan, there are eight other countries where the absolute rise in enrolments was greater in secondary than in primary education (see Table III): the Netherlands, Switzerland, Finland, Ireland, Norway, the United Kingdom, Greece and Italy. On the other hand, the rise in enrolments in higher education was everywhere, except in Greece, very much lower than the rise at the other levels. In short, the overall rise in enrolments between 1950 and 1965 was very irregularly distributed among the different levels of education from one country to another. In Italy, for example, over 80 per cent of the increase was due to secondary education, while in Turkey it was due for a slightly lower percentage to primary education.

14. The structure of the educational pyramid in each Member country has therefore changed during the 15 years of the period under study (see Table IV). There were relatively fewer pupils in 1965 than in 1950 at the first level and more in secondary and higher education. In 1950, no country had more than 4 per cent of its enrolments in higher education (apart from the United States: 7.2 per cent). In 1965 over half of the countries were above that percentage, while the United States was still in the lead with 10 per cent (1).

B. Relative rise in enrolments

15. Table V shows the rate of increase in enrolments at each level of education between 1950 and 1965. The rate of first-level enrolments is always lower than at subsequent levels. Secondary education always increased more quickly than higher education in France, Iceland, Norway and four Mediterranean countries (Spain, Italy, Portugal and Turkey). But higher education rose more rapidly in the remaining 16 countries.

16. However, the rise in enrolments at each level of study was not uniform during the 15 years of the period. In order to examine this point, we calculated the growth indices as compared with

(1) The figures in Tables IV and V should be used with caution as the period of study is not the same at each level in all countries. At the same time, the reforms introduced in some countries during the period under study distort comparison to some extent (e.g. in Denmark). See Annex II in this respect.

TABLE III - Increase in enrolments at each level of education
between 1950 and 1965

	Absolute increase (thousands)				Distribution (%)			
	1st level	2nd level	3rd level	Total	1st level	2nd level	3rd level	Total
GERMANY	- 707	916	233	442	///	///	///	///
AUSTRIA	- 52	122	27,8	98	///	///	///	///
BELGIUM	465	278	54,2	797	58,3	34,9	6,8	100,0
FRANCE	2.266	2.150	337	4.753	47,7	45,2	7,1	100,0
LUXEMBOURG	10,5	3,1	(0,5)	(14,1)	74,5	22,0	3,5	100,0
NETHERLANDS	303	540	74,2	917	33,0	58,9	8,1	100,0
SWITZERLAND	(76)	(138)	21,8	(236)	32,2	58,5	9,3	100,0
DENMARK	130	69	31,4	230	56,4	29,9	13,7	100,0
FINLAND	55	224	28,9	308	17,9	72,7	9,4	100,0
ICELAND	33	69	(8,1)	(110)	30,0	62,7	7,3	100,0
IRELAND	(11,7)	(9,~)	(0,5)	(21,2)	55,2	42,4	2,4	100,0
NORWAY	92	158	(14,9)	(265)	34,7	59,6	5,7	100,0
UNITED KINGDOM	527	1.298	252	2.077	25,4	62,5	12,1	100,0
SWEDEN	227	121	56,6	405	56,0	29,9	14,1	100,0
SPAIN	831	732	78,6	1.642	50,6	44,6	4,8	100,0
GREECE	51	(240)	50,0	(341)	14,9	70,4	14,7	100,0
ITALY	284	1.946	164	2.394	11,9	81,3	6,8	100,0
PORTUGAL	259	226	20,5	506	51,2	44,7	4,1	100,0
TURKEY	2.307	587	74,7	2.969	77,7	19,8	2,5	100,0
YUGOSLAVIA	1.130	339	130	1.599	70,7	21,2	8,1	100,0
CANADA	1.782	823	243	2.848	62,6	28,9	8,5	100,0
UNITED STATES	13.768	6.474	3.273	23.515	58,5	27,5	14,0	100,0
JAPAN	- 502	3.772	635	3.955	///	///	///	///

Source : based on Table II.

TABLE IV - Breakdown of enrolments by level of education
in 1950 and 1965

	1950			1965			(%)
	1st level	2nd level	3rd level	1st level	2nd level	3rd level	
GERMANY	68,7	28,8	1,5	57,7	36,7	3,8	
AUSTRIA	81,9	15,2	1,9	70,5	23,8	4,0	
BELGIUM	71,1	26,7	2,2	66,4	29,7	3,9	
FRANCE	79,2	17,3	2,9	65,2	29,0	4,7	
LUXEMBOURG	77,4	21,2	0,2	76,8	21,4	1,1	
NETHERLANDS	70,8	25,5	2,3	59,1	35,0	3,9	
SWITZERLAND	62,2	35,3	2,5	55,1	40,8	4,1	
DENMARK	66,0	30,8	3,1	63,6	30,6	5,8	
FINLAND	78,2	19,7	1,9	58,3	37,2	4,4	
IRELAND	74,5	24,0	1,5	67,8	29,9	2,3	
ICELAND	61,2	34,0	2,4	58,7	38,0	2,4	
NORWAY	75,5	21,2	3,3	59,5	35,8	4,2	
UNITED KINGDOM	66,0	29,4	2,5	56,3	36,3	4,5	
SWEDEN	78,2	19,3	2,5	70,9	22,8	6,3	
SPAIN	86,0	11,6	2,4	74,1	22,7	3,2	
GREECE	80,4	18,2	1,4	65,8	29,9	4,3	
ITALY	80,4	16,1	3,5	62,8	32,8	4,3	
PORTUGAL	85,4	11,9	2,1	71,6	25,0	2,9	
TURKEY	90,6	8,0	1,3	82,5	15,4	2,1	
YUGOSLAVIA	84,2	12,5	2,5	78,0	17,1	4,8	
CANADA	82,1	14,7	3,2	71,9	22,1	6,0	
UNITED STATES	72,3	20,5	7,2	66,5	23,5	10,0	
JAPAN	59,8	38,1	2,1	47,3	47,8	4,7	

Source : based on Table II; the totals differ slightly from 100 per cent because of enrolments not divided between the levels of study.

TABLE V - Annual rate of increase in enrolments
at each level of education, between 1950 and 1965

Annual rate of increase (%)	First level	Second level	Third level	Total enrolments
< 0	Germany (-0,8) Austria (-0,4) Japan (-0,3)			
0 to 0,9	Greece (0,3) Italy (0,3) Ireland (0,5) Finland (0,7) United King. (0,7)			Germany (0,4) Austria (0,6)
1 to 1,9	Switz. (1,0) Netherl. (1,2) Denmark (1,7) Norway (1,7) Spain (1,7) Luxembourg (1,9)	Denmark (1,9)		Ireland (1,1) Japan (1,3) Greece (1,7) United Kingd. (1,8) Switzerl (1,8) Luxembourg (1,9)
2 to 2,9	Sweden (2,0) Portugal (2,3) France (2,5) Belgium (2,6)	Germany (2,0) Luxembourg (2,0) Ireland (2,6) Japan (2,8) Switz. (2,8)		Denmark (2,0) Italy (2,0) Netherlands (2,4) Finland (2,7) Sweden (2,7) Spain (2,8)
3 to 3,9	United States (3,2) Yugoslavia (3,2) Iceland (3,8)	United Kingd (3,2) Austria (3,6) Belgium (3,8) Sweden (3,8)	Italy (3,5)	Belgium (3,1) Norway (3,3) Portugal (3,5) United States (3,8) France (3,8) Yugoslavia (3,8)
4 to 4,9	Canada (4,1)	Netherl. (4,6) United St. (4,7) Iceland (4,9)	Iceland (4,1) Ireland (4,4) Spain (4,8) Norway (4,9)	Iceland (4,1)
5 to 5,9		Greece (5,1) Yugoslavia (5,5)	Switerl. (5,2) Austria (5,8) Portugal (5,8)	Canada (5,1)
6 to 6,9	Turkey (6,1)		United Kingdom (6,0) United States (6,1) Netherlands (6,3) Denmark (6,4) Japan (6,9) Germany (6,9)	Turkey (6,7)
7 to 7,9		Italy (7,0) Norway (7,0) Finland (7,2) Spain (7,5) France (7,5) Canada (7,9)	Belgium (7,1) France (7,1)	
8 to 8,9		Portugal (8,8)	Yugoslavia (8,4) Finland (8,5)	
9 to 9,9			Sweden (9,1) Canada (9,6) Greece (9,9) Turkey (9,9)	
10 to 10,9				
11 to 11,9		Turkey (11,5)		
12 to 12,9			Luxembourg (12,7)	

Source : based on Table II.

average enrolments in each five-year period from 1951 to 1955, 1956 to 1960 and 1961 to 1965. The results are given in Table VI (1). The average indices are as follows:

	1951-55 to 1956-60	1956-60 to 1961-65	1951-55 to 1961-65
1st Level	111	106	118
2nd Level	134	132	180
3rd Level	139	154	215

The rise in higher education enrolments speeded up at the end of the period, while primary and secondary education enrolments tended to slow down.

17. Graphs IV, V and VI demonstrate this conclusion. The x-axis shows the index for the second period as compared with the first and the y-axis the third period as compared with the second. At first level (Graph IV), most countries are below the line bisecting the angle formed by the axes of the graph, which means that the increase at the end of the period is lower than that at the beginning. In higher education (Graph VI), the opposite may be observed, while in secondary education (Graph V) the countries are more or less equally divided on either side of the bisecting line. Furthermore, the correlation between the indices is higher in secondary education ($r = + 0.68$) than in primary ($r = + 0.51$) and higher education ($r = + 0.38$).

18. We have endeavoured to group countries with more or less similar growth characteristics and proceeded as follows for this purpose. The increase in each level of education between the second period (1956-60) and the third (1961-65) may be higher (+) or lower than or equal (-) to the increase between the first period (1951-55) and the second. A succession of signs such as (+++) for example means that the rise for the country concerned was higher in primary education, lower in secondary education, and higher in higher education. As there are three levels of study, $2 \times 2 \times 2 = 8$ groups of signs are therefore theoretically possible. In fact, 14 of the 17 countries for which data exist concerning the three levels are divided into two groups (-++) and (--+), with a slower increase in primary education and a faster increase in higher education, while the difference appears in secondary education, where the rise was more rapid in 8 countries (Belgium, France,

(1) The indices calculated for the whole period over an average of ten years are not therefore directly comparable with those in Table II, which are calculated for 15 years. The results are nonetheless coherent from one table to the other, except that in Table VI the rise at first level in Germany seems to be slightly higher than at second level.

TABLE VI - Increase in enrolments at each level of education
between 1951-55, 1956-60 and 1961-65

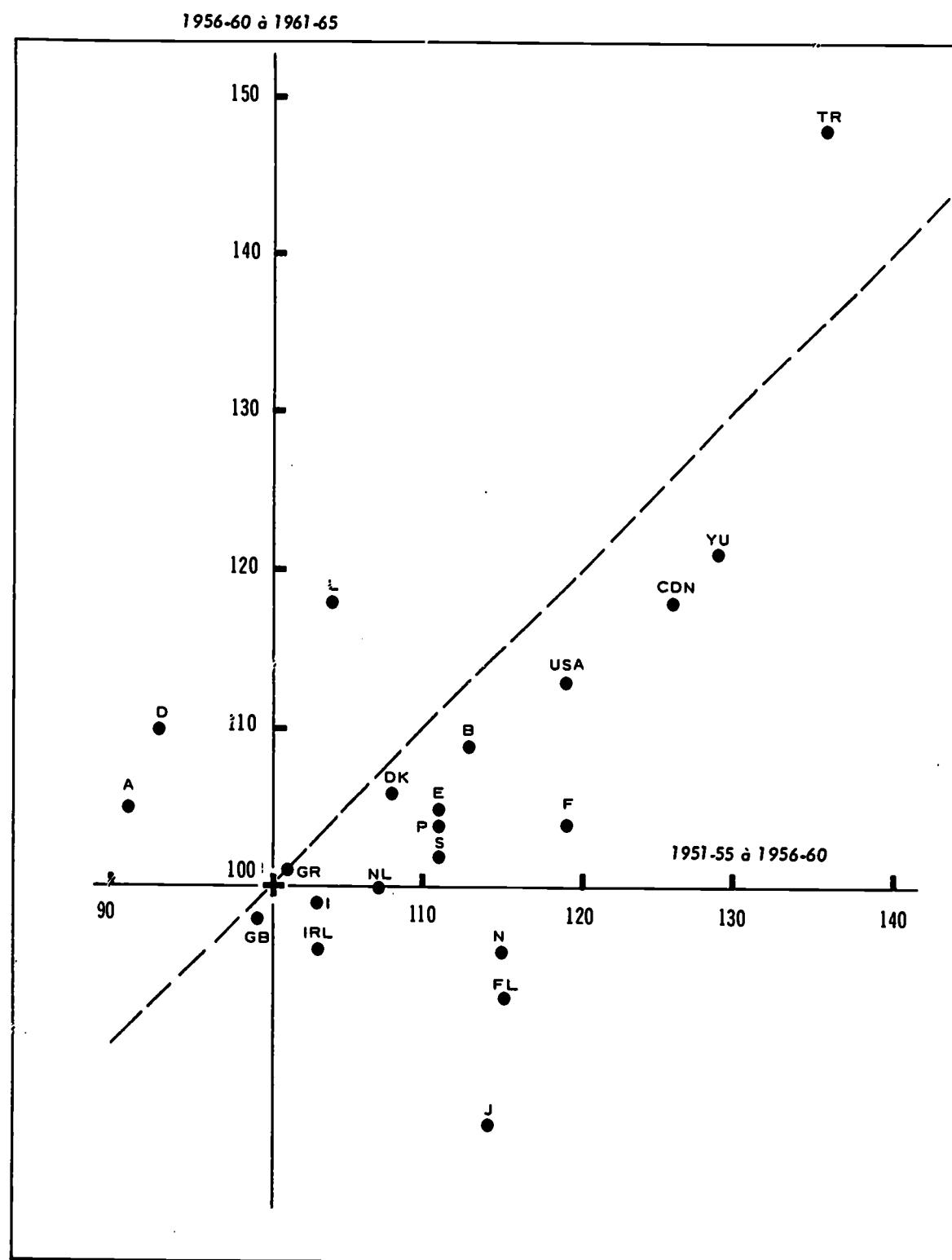
(base 100 for the preceding period)

	1951-55 to 1956-60			1956-60 to 1961-65			1951-55 to 1961-65		
	1st level	2nd level	3rd level	1st level	2nd level	3rd level	1st level	2nd level	3rd level
GERMANY	93	99	(161)	110	100	138	102	99	(222)
AUSTRIA	91	127	155	105	101	158	96	128	245
BELGIUM	113	122	134	109	129	149	124	157	199
FRANCE	119	(146)	(126)	104	155	162	124	(226)	(204)
LUXEMBOURG	104	108	...	118	108	...	123	117	...
NETHERLANDS	107	139	138	100	121	145	107	168	199
SWITZERLAND	...	...	125	...	...	151	...	...	189
DENMARK	103	121	132	106	100	156	114	121	205
FINLAND	115	154	134	93	139	166	107	213	222
IRELAND	103	108	...	96	119	...	98	129	...
NORWAY	115	145	...	96	140	...	110	204	...
UNITED KINGDOM	99	133	(134)	98	112	147	97	149	(196)
SWEDEN	111	137	138	102	112	177	113	153	243
SPAIN	111	137	(118)	105	155	129	116	213	(152)
GREECE	(101)	...	(135)	101	...	185	(103)	...	(250)
ITALY	103	134	109	99	146	141	102	196	154
PORTUGAL	111	165	130	104	160	140	115	264	(182)
TURKEY	136	196	(185)	148	163	161	201	320	(298)
YUGOSLAVIA	129	127	162	121	161	167	156	205	272
CANADA	126	149	160	118	160	181	148	239	289
UNITED STATES	119	129	140	113	131	142	135	170	199
JAPAN	114	110	125	85	125	138	96	137	173
Average	111	134	139	106	132	154	118	180	215

Source : Annex I, Table VIII.

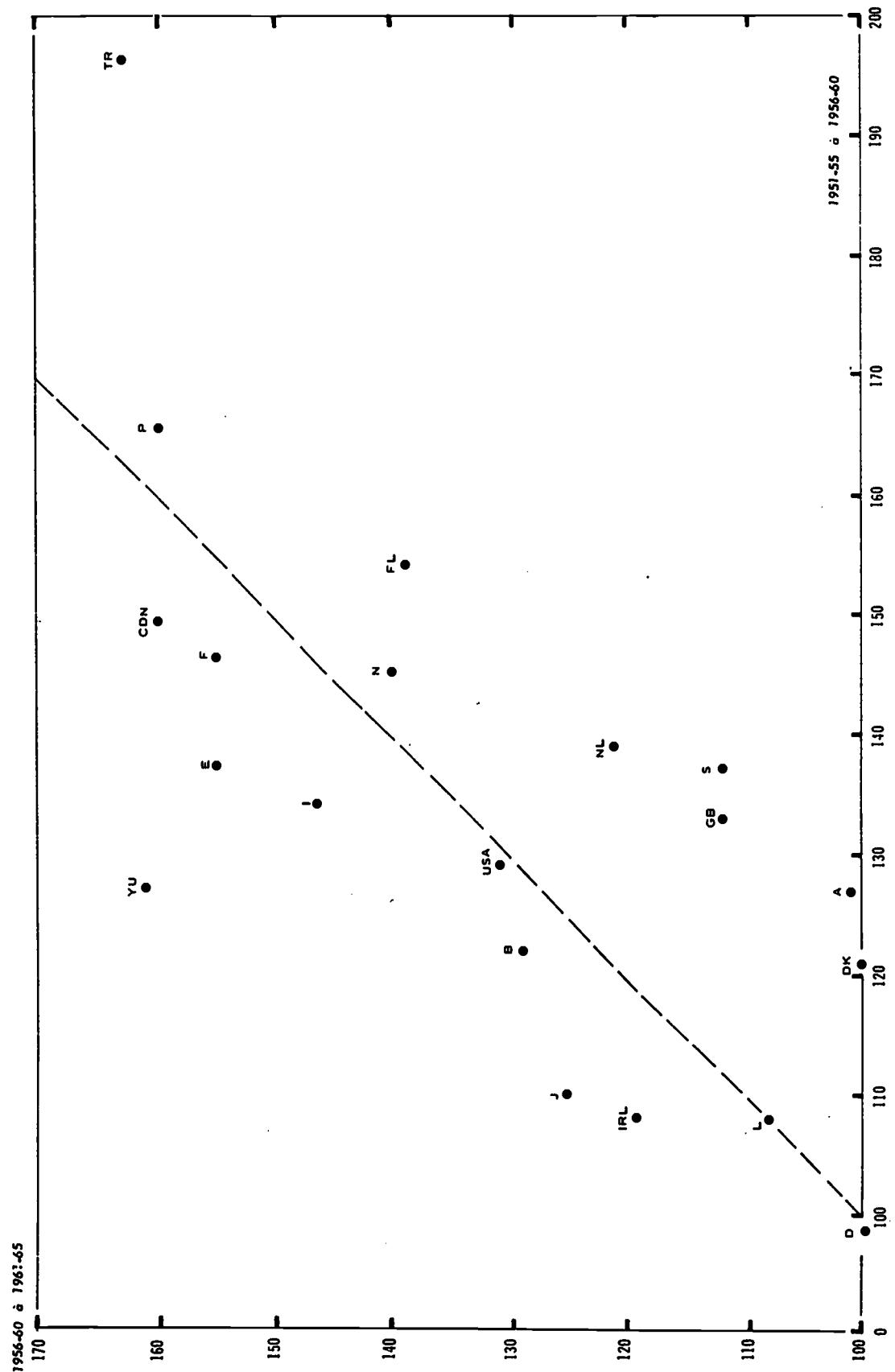
Graphique IV - Graph IV
ACCROISSEMENT DES EFFECTIFS DU 1^{er} DEGRE DE 1951-55 A 1956-60
ET DE 1956-60 A 1961-65

INCREASE IN 1st LEVEL ENROLMENTS FROM 1951-55 TO 1956-60
AND FROM 1956-60 TO 1961-65



Source : Tableau VI - Table VI

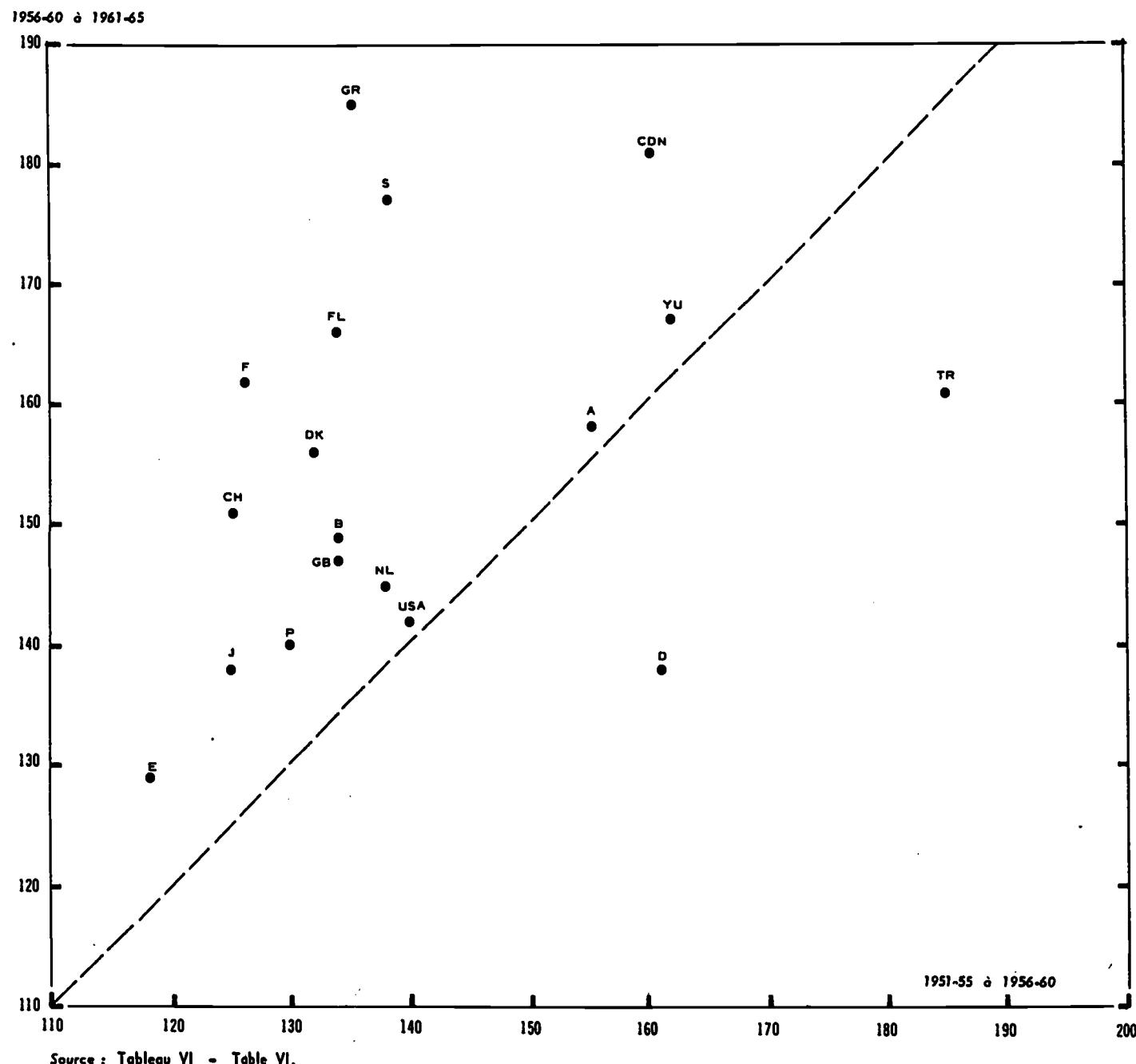
Graphique V - Graph V
**ACCROISSEMENT DES EFFECTIFS DU 2^e DEGRE DE 1951-55 A 1956-60
 ET DE 1956-60 A 1961-65**
**INCREASE IN 2nd LEVEL ENROLLMENTS FROM 1951-55 TD 1956-60
 AND FRDM 1956-60 TD 1961-65**



Source : Tableau VI - Table VI.

Graphique VI - Graph VI

ACCROISSEMENT DES EFFECTIFS DU 3^e DEGRE DE 1951-55 A 1956-60 ET DE 1956-60 A 1961-65
INCREASE IN 3rd LEVEL ENROLMENTS FROM 1951-55 TO 1956-60 AND FROM 1956-60 to 1961-65



Spain, Italy, Yugoslavia, Canada, the United States and Japan) and less rapid in the 6 others (the Netherlands, Denmark, Finland, the United Kingdom, Sweden and Portugal).

Three groups represent one country only (+++) for Germany, (+++) for Austria and (+--) for Japan. The last three possible groups (+++), (-++) and (---) are not represented.

C. Trend within each level of study

19. As we have said in the Introduction, we shall confine ourselves here to a few remarks directly concerned with the statistical material in Annex I, while referring the reader to the Secretariat's specialised work for an exhaustive study.

20. Tables VII to X show the growth indices for the main types of study within each of the three levels of education (1); these tables lead to certain significant conclusions:

- (i) Pre-school education has increased more rapidly almost everywhere than primary education proper, although its relative importance is still small in several countries (see Table VII).
- (ii) No very marked trend appears when comparing the respective rises in general education and technical education (see Table VIII). Of the 15 countries appearing in this table, 8 have a higher growth index for technical education than for general education. At the same time, in most countries teacher training has increased less quickly than total secondary school enrolments but more rapidly than primary school enrolments.
- (iii) Non-university education has generally increased more quickly than university education (especially in Turkey and Yugoslavia), but it still varies a great deal in importance (see Table IX); it is practically non-existent in Austria, but on the other hand concerns over half of the enrolments in the United Kingdom.
- (iv) Table X only concerns university enrolments due to the lack of sufficiently complete figures on non-university education. It shows that, apart from Germany, enrolments in medicine have risen less quickly than in the other branches. On the other hand, the science disciplines have on the whole developed more rapidly.

(1) The indices are calculated in relation to average enrolments from 1951 to 1955 and from 1961 to 1965. The percentages are calculated on enrolments in the latter period.

TABLE VII - Increase in enrolments in pre-school and primary education
between 1951-55 and 1961-65

	Index : base 100 in 1951-55			Average proportion Pre-primary in 1961-65 (%)
	Pre-primary	Primary	Total 1st level	
AUSTRIA	137	92	96	10,8
BELGIUM	131	121	124	31,2
FRANCE	129	123	124	22,1
LUXEMBOURG	144	119	123	14,7
NETHERLANDS	118	103	107	23,8
IRELAND	100	103	102	29,1
UNITED KINGDOM	124	97	97	1,0
GREECE	(229)	(100)	(103)	4,9
ITALY	123	97	102	22,1
PORTUGAL	205	115	115	1,0
CANADA	201	146	148	5,1
UNITED STATES	152	134	135	7,4
JAPAN	200	92	96	8,3

Source : based on Annex I, Table IV.

TABLE VIII - Increase in enrolments in general, technical and vocational education, and teacher training between 1951-55 and 1961-65

	Index : base 100 in 1951-55				Average proportion General education in 1961-65 (%)
	General	Technical	Teacher training	Total 2nd level	
GERMANY	133	85	-	99	40,6
AUSTRIA	116	133	157	128	29,7
BELGIUM	127	210	169	157	49,8
LUXEMBOURG	109	131	114	117	60,7
NETHERLANDS	183	156	-	168	48,1
DENMARK	105	133	263	121	40,7
FINLAND	215	215	85	213	77,4
IRELAND	160	110	79	129	46,9
NORWAY	246	136	-	204	74,5
SWEDEN	122	321	81	153	64,0
SPAIN	252	134	202	213	75,1
ITALY	184	262	163	196	70,5
PORTUGAL	230	(315)	152	(264)	(49,0)
TURKEY	354	245	245	320	75,8
YUGOSLAVIA	180	228	134	205	27,5

Source : based on Annex I, Table V.

TABLE IX - Increase in university and non-university enrolments between 1951-55 and 1961-65

	Growth indices			Average proportion Non-university in 1951-55 (%)
	University	Non-university	Total 3rd level	
GERMANY	202	(284)	(222)	30,8
AUSTRIA	245		245	-
BELGIUM	175	243	199	43,3
FRANCE	207	(194)	(204)	22,5
NETHERLANDS	184	218	199	49,8
SWITZERLAND	178	250	189	20,5
DENMARK	198	215	205	42,9
IRELAND	172	...	...	12,9
NORWAY	260			(33,0)
UNITED KINGDOM	152	(248)	(196)	58,4
SWEDEN	269	138	243	11,1
SPAIN	148	(161)	(152)	33,5
GREECE	(270)	(127)	(250)	7,2
ITALY	154	167	154	6,6
PORTUGAL	182	(182)	(182)	22,8
TURKEY	240	(679)	(298)	30,0
YUGOSLAVIA	203	886	272	32,9

Source : based on Annex I, Table VI.TABLE X - Increase in enrolments in the various branches of university education between 1951-55 and 1961-65

	Growth Indices				Average distribution in 1961-65			
	Scien- ces (a)	Medi- cine	Others (a)	Total Univers.	Scien- ces (a)	Medi- cine	Others (a)	Total
GERMANY	177	242	210	202	33,6	17,4	49,0	100,0
BELGIUM	197	140	186	175	27,4	23,5	49,1	100,0
FRANCE	265	140	203	207	39,2	16,2	44,6	100,0
NETHERLANDS	200	117	212	184	37,2	16,0	46,8	100,0
SWITZERLAND	191	124	197	178	35,4	16,4	48,2	100,0
DENMARK	196	179	211	198	28,9	24,8	46,3	100,0
IRELAND	193	114	190	172	28,4	16,3	55,3	100,0
NORWAY	281	149	281	260	44,9	9,0	46,1	100,0
SWEDEN	262	172	304	269	30,2	10,8	59,0	100,0
SPAIN	201	114	144	148	32,7	26,6	40,7	100,0
GREECE	...	...	...	(270)	26,8	77,9	55,3	100,0
ITALY	143	78	187	154	25,7	10,0	64,3	100,0
PORTUGAL	186	104	223	182	39,3	12,7	48,0	100,0
TURKEY	275	173	248	240	24,9	13,1	62,0	100,0
YUGOSLAVIA	218	155	207	203	40,7	12,3	47,0	100,0

Source : based on Annex I, Table VII.

Note : (a) - Science : Pure science, Architecture, Technology, Agriculture.
 - Others : Arts, Fine Arts, Education, Law, Social Sciences.

D. Enrolment differences between boys and girls

21. In primary education, equality between boys and girls exists in practically all Member countries except Turkey (37 per cent girls in 1950 and 40 per cent in 1965).

22. In secondary education (see Table XI), equality was very nearly achieved in 1965 except in the Mediterranean countries in spite of an appreciable improvement since 1950. However, the differences between types of study are quite marked. Girls are relatively more numerous in general education than in technical and are almost everywhere very much in the majority in teacher training.

23. Lastly, in higher education (see Table XII), we are still quite a long way off equality since the highest proportion of girls in 1965 was not quite 40 per cent (the United States, France and Sweden), apart from Finland where this proportion was 48 per cent. Nonetheless, the progress made since 1950 was generally very marked.

TABLE XI - Proportion of girls in secondary education
in 1950 and 1965 (per cent)

	1950				1965			
	General	Techni- cal and voca- tional	Teacher training	Total	General	Techni- cal and voca- tional	Teacher training	Total
GERMANY	44	42	-	43	45	47	-	46
AUSTRIA	35	..	62	..	39	73	..	..
BELGIUM	43(b)	54(b)	67(b)	48(b)	46(g)	47(g)	67(g)	48(g)
FRANCE	52	44	62	49	52	68	52	52
NETHERLANDS	45	40	-	42	48(g)	43(g)	-	45(g)
DENMARK	50	..	35	..	52	..	43	..
FINLAND	57	..	..	..	57	..	..	..
IRELAND	..	..	70	..	..	..	78(g)	..
NORWAY	..	34(b)	..	..	48	37	-	45
ENGLAND & WALES	..	..	..	49	..	..	..	48(g)
SWEDEN	54(a)	..	..	..	54	..	..	..
SPAIN	35	..	73	..	41	..	62(g)	..
GREECE	37(d)	26(e)	..	..	43(f)	..	..	..
ITALY	38	21	85	38	45	27	87	43
PORTUGAL	47	27	47	38	50(g)	33(g)	91(g)	42
TURKEY	25	27	9	24	27	29	43	28
YUGOSLAVIA	45(c)	25(c)	64(c)	35(c)	53	38	61	43
JAPAN	..	..	..	46	..	..	..	48

Source : based on national yearbooks.

- Notes : (a) 1951.
 (b) 1952.
 (c) 1953.
 (d) 1955.
 (e) 1956.
 (f) 1963.
 (g) 1964.

TABLE XII - Proportion of girls in higher education
towards 1950 and 1965

	Beginning of period		End of period	
	Year	Proportion	Year	Proportion
GERMANY	1950	20 (a)	1965	23
AUSTRIA	1951	21	1965	24
BELGIUM	1952	26	1964	32
FRANCE	1955	32	1965	39
NETHERLANDS	1950	20	1965	25
SWITZERLAND (b)	1955	13	1965	18
DENMARK	1950	24	1965	35
FINLAND	1952	39	1965	48
IRLAND (b)	1950	27	1964	31
NORWAY (b)	///	..	1965	24
SWEDEN	1951	29	1962	38
SPAIN	///	..	1964	21
GREECE	1955	23	1964	29
ITALY	1950	25	1964	32
PORTUGAL	1950	24	1964	35
TURKEY (b)	1950	20	1965	25
YUGOSLAVIA	1951	33	1965	34
UNITED STATES	1950	32	1965	39
JAPAN	1950	10	1965	24

Source : Statistical survey on the quantitative development of higher education, OECD to be published

- Notes : (a) excluding engineering schools.
 (b) university only.

CHAPTER III

POPULATION GROWTH AND THE INCREASE IN ENROLMENTS

24. In this Chapter, we shall consider the effect of demographic factors on the rise in enrolments at each level of education, and the way we shall go about this is dictated by a difficulty of method which should first be pointed out.

25. If we know the age distribution of enrolments, we can calculate an enrolment rate for each age or for any age-group. These rates combined would certainly be the best possible tool for our present purposes. Unfortunately, apart from a few countries, few exist for the period under study so that they cannot be used for any comparison, no matter how general.

26. We shall therefore begin by analysing the trend of the population belonging to the age-groups which are roughly speaking likely to enrol at each level of education; we shall then compare this trend with the trend of enrolments (section A) and this will lead us to a brief review of the birthrate during the last few decades (section B). Next, as we have done in Chapter I, we shall consider the effect on the rise in enrolments of population growth and of the level of enrolments at the beginning of the period (section C). Lastly, we shall make a direct study of enrolment ratios (1) (section D) and conclude with a study of the enrolment rates available (section E).

A. The increase in enrolments and in the corresponding age-groups

27. As a first approximation, we shall take the age of enrolment at each level as being between the following limits:

- for the 1st level: 5 to 14 years of age;
- for the 2nd level: 10 to 19 years of age;
- for the 3rd level: 20 to 24 years of age.

The real limits will of course vary from one country to another with the theoretical length of study and the extent to which classes are repeated. As we shall see later, however, the combination of different age-groups in any case introduces a new slant, so that any additional refinement is pointless. At the

(1) By enrolment ratio we mean the ratio between the population enrolled at a level of education (e.g. 1st level) and the total population in the age-group approximately corresponding to this (e.g. the population aged 5 to 14).

These ratios are often wrongly called enrolment rates but we consider it essential to keep this title for one case only where a ratio is established between enrolments at a specific age (or for a specific age-group) and the total population belonging to the corresponding age or age-group.

TABLE XIII - Increase in the numbers of the 5-14, 10-19 and 20-24 age-groups
between 1951-55, 1956-60 and 1961-65

	1951-55 to 1956-60			1956-60 to 1961-65			1951-55 to 1961-65 (base 100 for the preceding period)		
	5-14 yrs	10-19 yrs	20-24 yrs	5-14 yrs	10-19 yrs	20-24 yrs	5-14 yrs	10-19 yrs	20-24 yrs
GERMANY	94	94	116	109	93	103	94	107	103
AUSTRIA	92	105	93	108	115	94	128	94	122
BELGIUM	114	105	91	109	115	125	96	137	121
FRANCE	127	113	93	115	110	101	101	122	141
LUXEMBOURG	106	104	87	115	110	113	109	114	115
NETHERLANDS	112	117	99	101	113	111	135	112	133
SWITZERLAND	109	121	103	103	111	111	116	97	134
DENMARK	104	118	102	93	105	105	116	124	134
FINLAND	115	119	98	98	115	107	112	112	117
IRELAND	104	103	89	99	98	93	103	137	125
ICELAND	121	118	94	115	123	108	140	146	146
NORWAY	113	123	94	101	114	115	113	113	140
UNITED KINGDOM	107	112	99	99	108	104	106	106	120
SWEDEN	105	122	100	92	105	119	97	128	119
SPAIN	107	102	90	105	105	92	112	107	83
GREECE	101	94	100	102	102	85	103	96	85
ITALY	100	100	100	101	100	99	101	100	99
PORTUGAL	105	99	99	103	102	91	109	101	90
TURKEY	122	109	106	122	121	101	149	131	107
YUGOSLAVIA	111	92	100	109	110	87	121	101	87
CANADA	125	122	107	117	125	108	146	152	115
UNITED STATES	122	121	99	112	120	114	137	145	113
JAPAN	106	107	104	91	106	105	96	113	109
Average	110	110	105	98	110	105	115	120	103

Source : Annex I, Table I.

same time, we first study the increase from one period to the next and the conclusions on this point would undoubtedly not have changed very much if we had taken other limits (1).

28. Table XIII therefore shows the increase during the period under study in the numbers in each of the three age-groups. This table should be compared with Table VI concerning enrolments; the comparative rise for all countries combined was as follows:

	1951-55 to 1956-60	1956-60 to 1961-65	1951-55 to 1961-65
(1st level (5-14 age-group	111 110	106 105	118 115
(2nd level (10-19 age-group	134 110	132 110	180 120
(3rd level (20-24 age-group	139 98	154 105	215 103

In principle, the rise in primary education is largely explained by population growth. It is not surprising therefore that the ratios are very similar. On the other hand, they differ considerably in secondary education and still more in higher education: the rise in enrolments was one and half times faster than the rise in the corresponding age-groups in secondary education and twice as fast in higher education.

29. Population growth was not uniform during the 15 years of this period. However, it varied approximately in the same direction as the rise in enrolments. In order to show this, we have grouped the Member countries on the basis of the three age-groups exactly in the same way as we did above on the basis of levels of education. By crossing the two classifications, we obtain Table XIV. The countries on the diagonal line descending from left to right, i.e. ten out of seventeen for which the two classifications are available, belong to identical groups in each category.

(1) Moreover, the age-groups used coincide with the five-year groups usually found in the demographic yearbooks, while age-groups adapted to each country would have necessitated additional calculations with all their concomitant approximations.

Lastly, comparisons between countries would in this case have been a problem because of the lack of homogeneity between the enrolment ratios calculated.

**TABLE XIV - Characteristics of the increases in enrolments at each level of education
and of the corresponding age-groups**

		Enrolments										Not available
		+++	++-	+ - +	+ - -	- + +	- + -	- - +	- - -			
Age-groups	+++											Luxembourg
	++-											Greece
	+--			Austria								
	--+		Germany			Italy						
	-++				Belgium France Spain Canada							Iceland
	-+-			Turkey	Yugo- slavia			Portugal				
	--+				U.S.A. Japan		Netherl. Denmark Finland U.K. Sweden				Switz. Ireland Norway	

When the classifications differ, the reason is usually that the categories chosen are not fine enough and in particular overlook approximate stability in the increase from one period to the next (as is the case for example for Germany and the United States).

30. If on the basis of the figures in Table XIV we draw up a classification allowing for this stability (1), then $3 \times 3 \times 3 = 27$ groups are possible this time. All of the 23 O.E.C.D. countries are distributed among 11 groups only, as follows (the symbols refer successively to the 5-14, 10-19 and 20-24 age-groups):

- ++ : Spain, Italy
- +- : Portugal
- + : Greece, Turkey, Yugoslavia
- ++ : Luxembourg
- +- : Austria
- + : Germany
- ++ : Canada, Japan
- + : the United States
- + : Belgium, France
- + : Iceland
- + : the Netherlands, Switzerland, Denmark, Finland, Ireland, Norway, the United Kingdom and Sweden.

This shows that all of the Mediterranean countries are characterised by relative demographic stability, especially in the age-group corresponding to primary education. At the same time, the Northern European countries, apart from Iceland, are all in the last group. The Western European countries are dispersed in several groups.

31. As the increase in the age-groups largely reflects the trend of births, we shall now examine the latter.

(1) We have arbitrarily assumed that the increase was stable when the ratio of the second period did not differ by more than 3 points above or below the ratio of the first period. We indicate this stability by the symbol ±.

B. Trend of births

32. Graph VII shows the trend of births since 1925 in each Member country except Turkey, for which the figures are not available. On the whole, the countries grouped in the last section have very similar curves. The birthrate in many Member countries was very much disturbed between 1940 and 1950, as Tables XV and XVI demonstrate. The number of births often increased considerably, the most spectacular case being provided by France, where the age-groups rose suddenly from under 600,000 to over 850,000. These changes affected primary education right at the start of the period under study, and secondary education towards 1955. Higher education, on the other hand, was only affected towards 1965, at the end of the period.

33. Many Member countries therefore had to face considerable difficulties and it may well be asked whether postwar generation enrolments have not been affected to a certain extent. The matter will be dealt with later.

C. The increase in enrolments, population growth and previous enrolments

34. We return here to the question asked at the end of Chapter I: is the influence of demographic factors identical for each level of education? The correlation between the growth index of enrolments and the growth index of the corresponding age-group is as follows (these correlations have been calculated on the basis of Tables VI and XIII for the entire period):

1st level: + 0.82
2nd level: + 0.36
3rd level: + 0.13.

This shows that the demographic factor is very important in primary education but loses much of its significance in secondary and higher education.

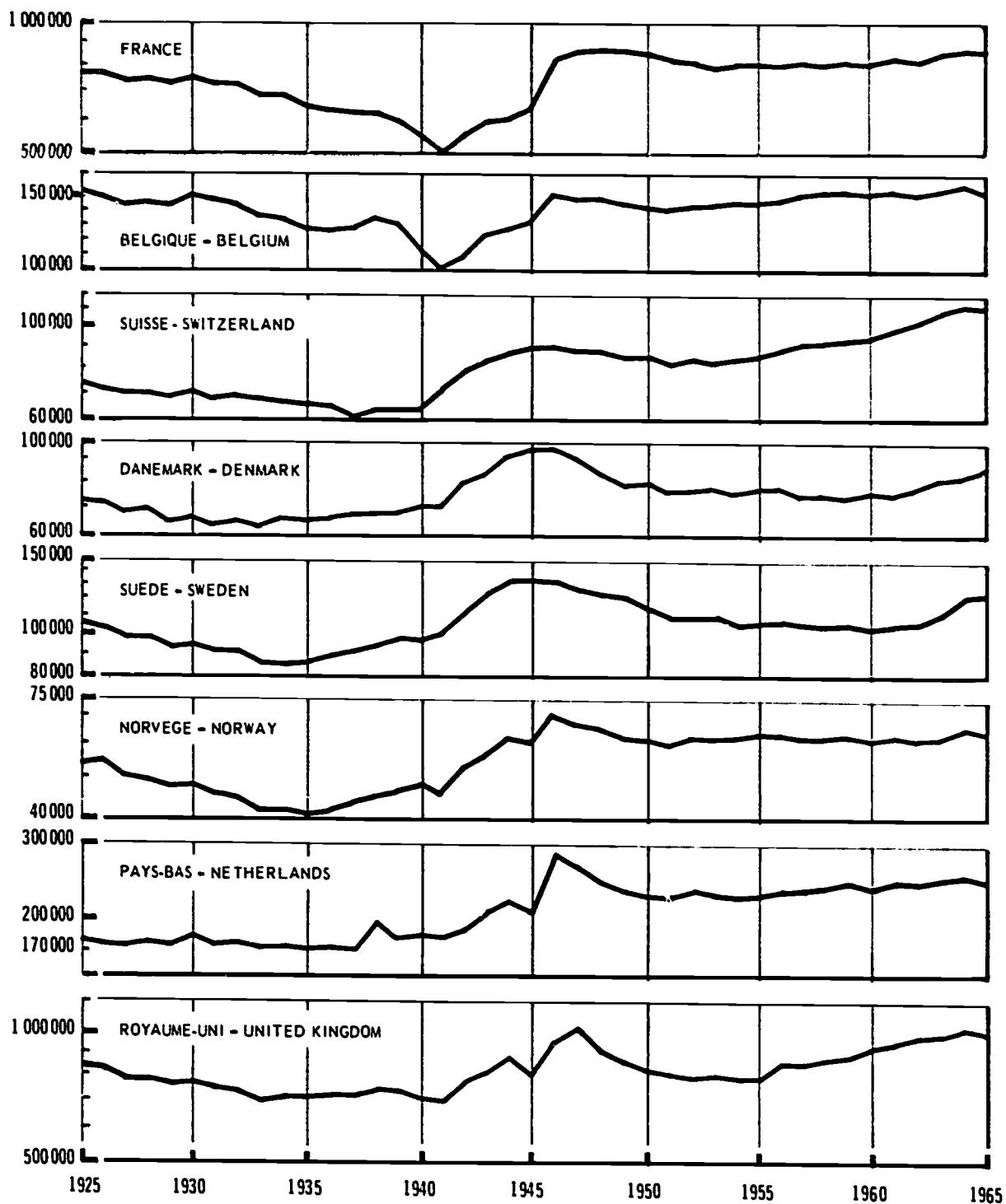
35. The correlation between the same growth ratio of enrolments and an ratio of enrolments at the beginning of the period (1) is equal to:

1st level: - 0.31
2nd level: - 0.76
3rd level: - 0.17.

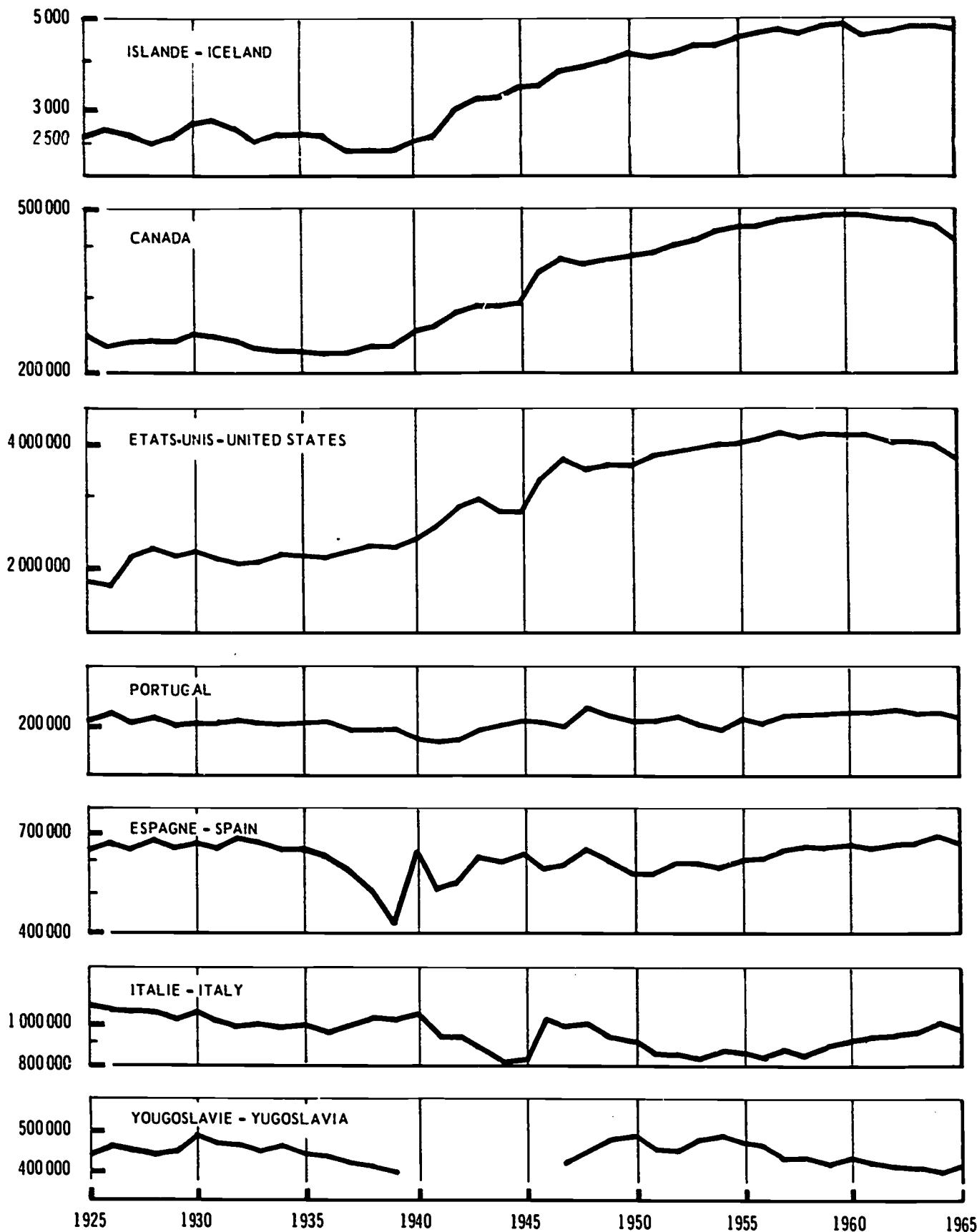
In primary education, maximum enrolment was practically achieved as early as 1950 in most Member countries and could make little further progress. In secondary education, on the other

(1) Ratio between average enrolments between 1951 and 1955 and the average size of the corresponding age-group for the same period.

Graphique VII - Graph VII
EFFECTIF ANNUEL DES NAISSANCES (1925 - 1965)
NUMBER OF BIRTHS PER YEAR BETWEEN 1925 AND 1965



Graphique VII - Graph VII
EFFECTIF ANNUEL DES NAISSANCES (1925 - 1965)
NUMBER OF BIRTHS PER YEAR BETWEEN 1925 AND 1965



Graphique VII - Graph VII
EFFECTIF ANNUEL DES NAISSANCES (1925-1965)
NUMBER OF BIRTHS PER YEAR BETWEEN 1925 AND 1965

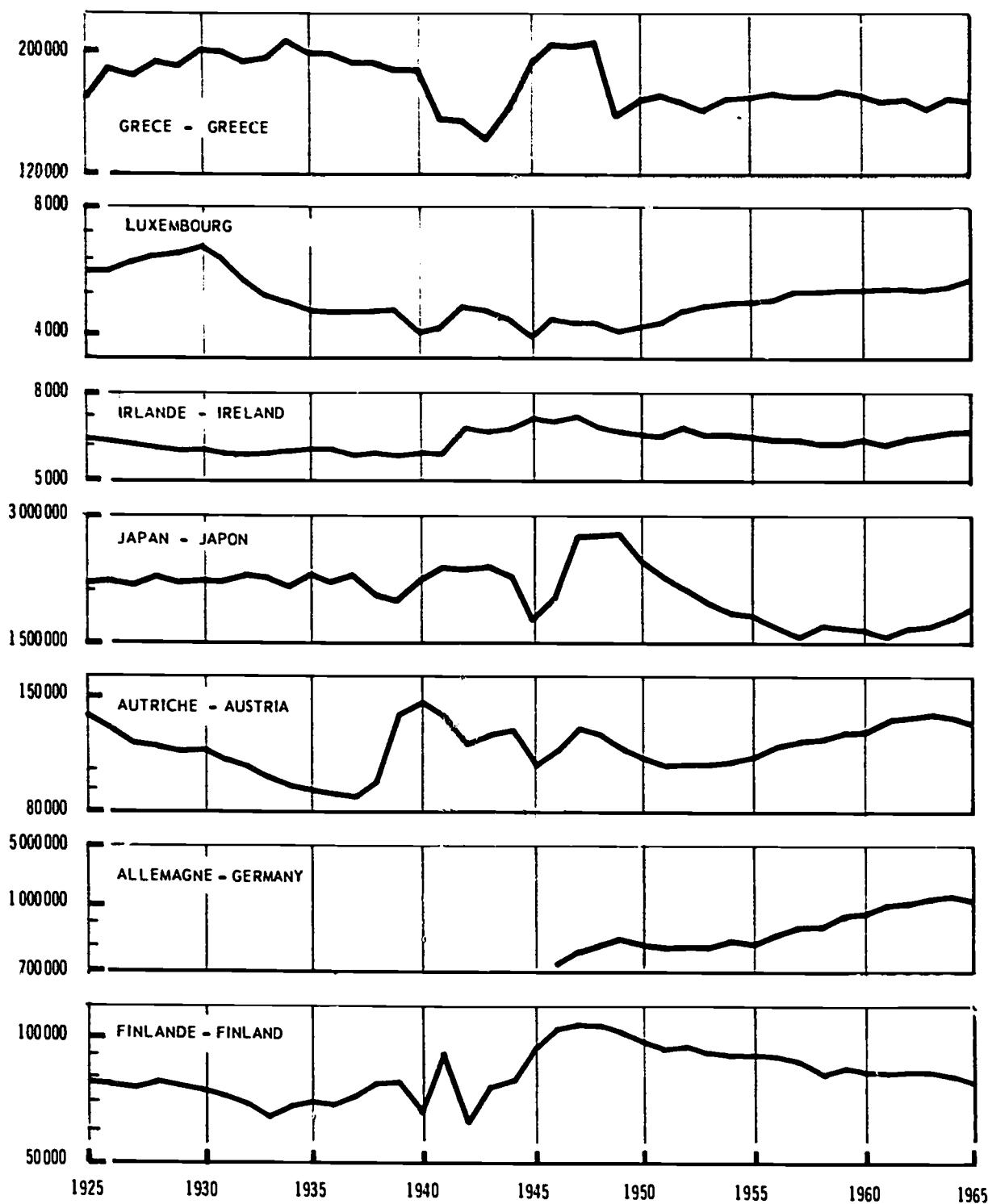


TABLE XV - Number of births from 1921-25 to 1961-65 (five-year averages)

	1921-25	1926-30	1931-35	1936-40	1941-45	1946-50	1951-55	1956-60	1961-65	(thousands)
GERMANY	...	...	...	...	...	793	805	914	1.039	
AUSTRIA	145	117	97.1	110	120	117	104	121	133	
BELGIUM	156	148	139	127	118	149	146	154	158	
FRANCE	771	748	691	598	572	864	814	817	857	
LUXEMBOURG	5.4	6.0	5.1	4.4	4.3	4.2	4.5	5.0	5.2	
NETHERLANDS	184	178	174	181	202	253	229	237	248	
SWITZERLAND	75.8	70.0	67.6	63.8	81.6	86.9	83.5	91.5	108	
DENMARK	74.6	67.8	64.4	68.1	84.2	86.4	77.0	75.3	81.2	
FINLAND	80.1	76.2	68.8	72.4	80.5	105	91.6	84.5	80.9	
IRELAND	61.4	59.4	57.4	56.8	63.9	66.1	62.8	60.5	62.5	
ICELAND	2.6	2.7	2.6	2.4	3.1	3.8	4.2	4.8	4.7	
NORWAY	60.0	50.1	43.3	45.2	56.1	65.9	62.5	63.0	63.8	
UNITED KINGDOM	907	783	719	722	791	912	796	874	985	
SWEDEN	115	97.0	87.4	93.3	122	125	108	106	114	
SPAIN	653	656	655	550	575	593	582	642	669	
GREECE	123	186	195	184	144	183	151	157	151	
ITALY	1.137	1.078	1.001	1.015	875	983	859	887	967	
PORTUGAL	207	207	205	198	196	209	206	211	215	
YUGOSLAVIA	440(a)	458	458	419(b)	...	461(b)	469	435	410	
CANADA	248	236	228	228	277	363	416	470	457	
UNITED STATES	1.818	2.120	2.118	2.252	2.757	3.545	3.935	4.243	4.061	
JAPAN	2.018	2.093	2.116	2.030	2.109	2.460	1.902	1.624	1.681	

Source : Annex I, Table III.

Notes : (a) two-year average.
(b) four-year average.TABLE XVI - Average increase in births from 1921-25 to 1961-65

	1921-25 to 1926-30	1926-30 to 1931-35	1931-35 to 1936-40	1936-40 to 1941-45	1941-45 to 1946-50	1946-50 to 1951-55	1951-55 to 1956-60	1956-60 to 1961-65	(base 100 : preceding period)
GERMANY	..	..	..	..	..	102	114	114	
AUSTRIA	81	83	113	109	98	89	116	110	
BELGIUM	95	94	91	93	126	98	105	103	
FRANCE	97	92	87	96	151	94	100	105	
LUXEMBOURG	112	84	87	97	97	109	109	104	
NETHERLANDS	97	98	104	112	125	91	103	105	
SWITZERLAND	97	98	104	112	125	91	103	105	
DENMARK	92	97	94	128	106	96	110	116	
FINLAND	91	95	106	124	103	89	98	108	
IRELAND	95	90	105	111	130	87	92	96	
ICELAND	97	97	99	113	103	95	96	103	
NORWAY	104	99	92	127	122	112	113	99	
UNITED KINGDOM	84	86	104	124	117	95	101	101	
SWEDEN	86	92	100	110	115	87	110	113	
SPAIN	84	90	107	131	102	86	98	108	
GREECE	100	100	84	105	103	98	110	104	
ITALY	151	105	94	78	127	83	104	96	
PORTUGAL	95	93	101	86	112	87	103	109	
YUGOSLAVIA	100	99	97	99	107	99	102	102	
CANADA	95	97	100	121	131	115	113	94	
UNITED STATES	117	100	106	122	129	111	108	97	
JAPAN	104	101	96	104	117	77	85	104	
Average (a)	99	95	98	110	116	95	104	104	

Source : based on Table XV.

Note : (a) excluding Germany and Yugoslavia.

hand, some countries advanced relatively little because they already had a high rate of enrolments, while others made considerable progress, which would appear to indicate that at this level the inequalities between Member countries tended rather to diminish. These observations are really quite straightforward. On the other hand, it is less evident that higher education has developed independently of the level of enrolments at the beginning of the period.

36. If we now combine the population growth index with the level of enrolments at the beginning of the period, the multiple correlation with the growth index of enrolments becomes (1):

1st level : 0.93
2nd level : 0.87
3rd level : 0.25.

If we now eliminate the effect due to the variation in the level of enrolments, we find the following partial correlation between the growth indices:

1st level : + 0.92
2nd level : + 0.64
3rd level : + 0.19.

37. To sum up, we can conclude that population growth and the level of enrolments at the beginning of the period largely explain the rise in primary and secondary school enrolments, the first variable being preponderant in primary and the second in secondary education. On the other hand, neither of these two variables can significantly explain the increase in higher education (2).

38. It will be noted that in order to interpret these results correctly we have endeavoured to explain the variation in enrolments from one period to the next and not their size at any particular date. In the latter case, it would obviously be absurd to conclude that the size of the age-group has no influence. Furthermore, all our calculations concern variations in the stock of enrolments; it would certainly have been more significant to allow for variations in flow (new entries, repeaters, dropouts, graduates). The statistics are very fragmentary on all of these points and their comparability also raises problems which are difficult to overcome in the present state of available documentation.

-
- (1) The correlation between the population growth index and the level of enrolments at the beginning of the period is:
1st level: + 0.16; 2nd level: + 0.06; 3rd level: + 0.25.
- (2) It might be assumed that in this case the influence of the previous rise in secondary education is overriding. However, the correlation between the growth index at third level from 1956-60 to 1961-65 and the growth index at second level from 1951-55 to 1956-60 is only +0.34, but this calculation is not very conclusive.

D. Trend of enrolment ratios

39. Having studied the trend of enrolments and the trend of the corresponding age-group we shall now analyse the ratio between these two which we call the enrolment ratio.

40. These ratios are assembled for each country and for the entire period in Tables IX to XIII in Annex I. Table XVII below simply shows the average (1) of these ratios for 1951-55, 1956-60 and 1961-65, while Table XVIII shows the increase in these averages from one five-year period to the next. However, a few remarks are called for in order to interpret the data in Table XVII correctly.

41. Since the length of study varies for each level of education from one country to another, comparisons between countries must be treated with caution, especially as regards primary and secondary education. On the other hand, the total length of these first two levels is approximately identical and we have therefore calculated an enrolment ratio covering the first and second levels (as compared with the population aged 5 to 19).

However, even when the length of study is approximately identical, the age structure of the school population biases comparison between countries and also, although to a smaller extent, comparison from one year to the next in the same country. This is especially the case for the enrolment ratio calculated on the basis of primary and secondary school enrolments and for the enrolment ratio calculated on the basis of total enrolments. It is in fact obvious that, all other things being equal, the ratio will be all the higher when the relative size of the age-groups corresponding to compulsory school attendance is greater. The deviation between the ratios does not therefore only reflect real differences in enrolments.

Thus, instead of making any direct comparison of the ratios in Table XVII, we shall examine their rise over the course of time (Table XVIII), since the difficulties we have just mentioned are then reduced.

42. The comparisons between 1951-55 and 1961-65 are summed up in Graph VIII (1st level), IX (2nd level) and X (3rd level). The y-axis of each graph shows the rise in enrolments and the x-axis the rise in the corresponding age-group. The ratio between these two increases gives the rise in the enrolment ratio, which may be read approximately along the group of dotted straight lines. In addition, the lines parallel to the axes of the graph after the 100 reference mark divide the countries into four groups according to whether both enrolments and the size of the age-group

(1) This is the average of the ratios for each of the five years of the period concerned and not the ratio of average enrolments to the average number in the corresponding age-group. The two calculations in fact give practically identical results.

TABLE XVII - Enrolment ratios at each level of education ("50-51-55, 1956-60 and 1961-65 averages)

	'st level			2nd level			'st and 2nd levels			3rd level			Total enrolments		
	Average 1950-55	Average 1956-60	Average 1961-65												
GERMANY	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
AUSTRIA	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
BELGIUM	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
FRANCE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
LUXEMBOURG	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
NETHERLANDS	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
SWITZERLAND	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
DENMARK	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
IRELAND	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
NORWAY	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
UNITED KINGDOM	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
SWEDEN	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
SPAIN	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
GREECE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
ITALY	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
PORTUGAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
TURKEY	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
YUGOSLAVIA	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
CANADA	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
UNITED STATES	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
JAPAN	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source : See Annex I, Tables IX to XXII.

TABLE XVIII - Increase in enrolment ratios at each level of education between 1950-55, 1956-60 and 1961-65

	1950-55 to 1956-60						1956-60 to 1961-65						1950-55 to 1961-65					
	'st level			2nd level			'st & 2nd levels			3rd level			'st level			2nd level		
	Avg.	Diff.	%	Avg.	Diff.	%	Avg.	Diff.	%	Avg.	Diff.	%	Avg.	Diff.	%	Avg.	Diff.	%
GERMANY	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
AUSTRIA	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
BELGIUM	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
FRANCE	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
LUXEMBOURG	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
NETHERLANDS	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
SWITZERLAND	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
DENMARK	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
FINLAND	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
IRELAND	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
NORWAY	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
UNITED KINGDOM	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
SWEDEN	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
SPAIN	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
GREECE	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
ITALY	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
PORTUGAL	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
TURKEY	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
YUGOSLAVIA	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
CANADA	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
UNITED STATES	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0
JAPAN	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0	100	100	0

Source : based on Table XVII.

diminished or increased (lower left and upper right quarters) or moved in the opposite direction (upper left and lower right quarters). In short, these graphs sum up the information in Tables VI, XIII and XVIII for the three groups considered and call for the following remarks:

- (a) In all three graphs, most countries are in the upper right quarter, i.e. enrolments have risen at the same time as the age-group; but higher education enrolments have risen in nine countries out of seventeen in line with a fall in the 20-24 age-group.
- (b) In primary education, countries are generally grouped around the bisecting line of the axes, which is logical since enrolments increase with the size of the age-group and the enrolment ratio therefore remains constant (1).
- (c) In secondary education, it will be observed that all the Mediterranean countries are grouped in the upper part of Graph IX, which therefore implies a higher rise in the enrolment ratio than in other countries.
- (d) In higher education, the enrolment ratios have risen faster than in secondary education since (apart from Switzerland) this increase is above 50 per cent for eleven countries out of twenty.

43. It has often been claimed that the "educational explosion" of the sixties was the consequence of the postwar "demographic explosion". We shall examine this assumption a little more closely. Earlier sections, in any case, already contain certain considerations on this point.

44. If we take S as enrolments at a particular level of study, P as the size of the corresponding age-group and W as the enrolment ratio we have by definition for each academic year:

$$W = \frac{S}{P}$$

If ΔS , ΔP and ΔW indicate the increase in these figures between any two academic years, we then have:

$$S + \Delta S = (W + \Delta W)(P + \Delta P)$$

or:

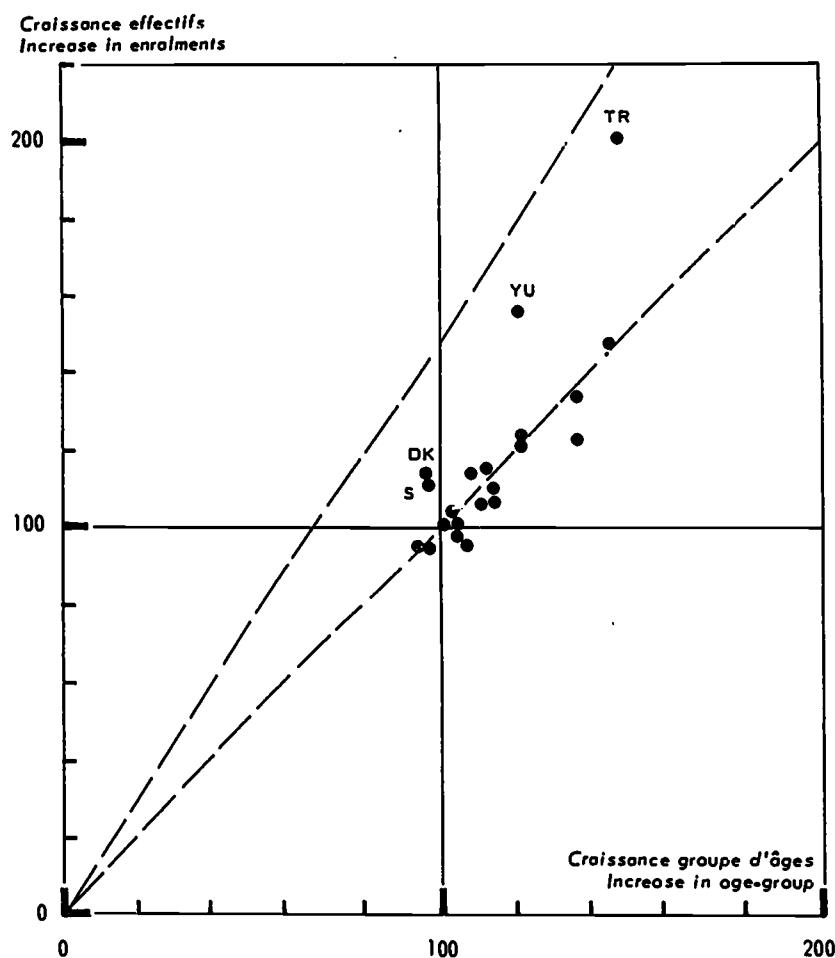
$$S + \Delta S = W \cdot \Delta P + P \cdot \Delta W + \Delta P \cdot \Delta W \quad \boxed{1}$$

- (1) The ratios for Turkey and Yugoslavia have risen. In the case of Turkey, compulsory school attendance was not operating in 1950. As regards Yugoslavia, it includes in the eight years of primary schooling enrolments which in other countries are included with secondary education. For Denmark and Sweden, the deviation from the bisecting line is probably due to the incidence of educational reforms made during the period.

Graphique VIII - Graph VIII

CROISSANCE DES EFFECTIFS SCOLARISES,
DU GROUPE D'AGES ET DE L'INDICE DE SCOLARISATION
DANS L'ENSEIGNEMENT DU PREMIER DEGRE (1951-55 A 1961-65)
(Base 100 EN 1951-55)

INCREASE IN SCHOOL ENROLMENTS,
IN AGE-GROUP AND IN RATIO OF ENROLMENTS
WITHIN FIRST-LEVEL EDUCATION (1951-55 TO 1961-65)
(1951-55 = 100)



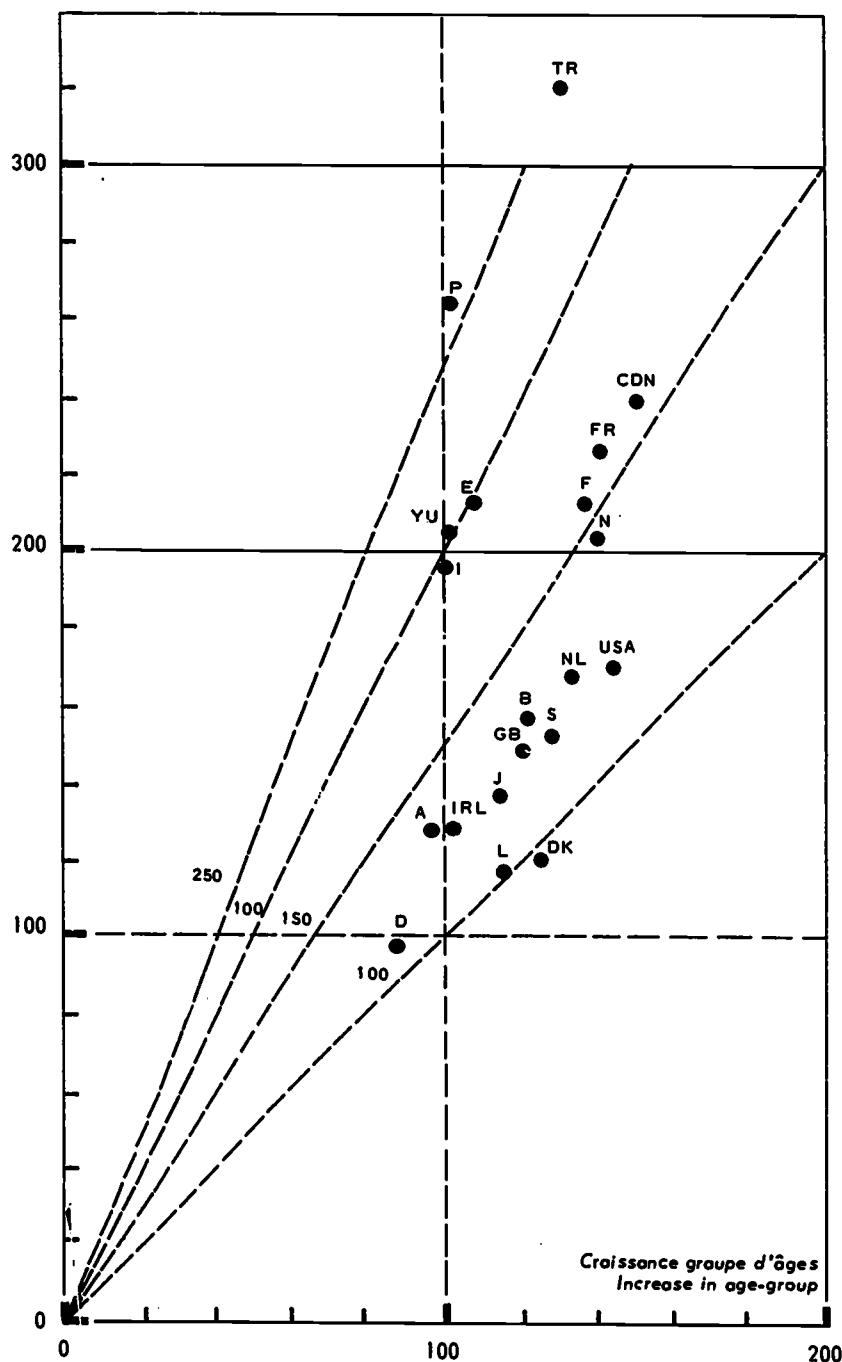
Sources : Effectifs: Tableau VI. - Enrolments : Table VI.
Groupe d'âges : Tableau XIII - Age-group : Table XIII.

Graphique IX - Graph IX

CROISSANCE DES EFFECTIFS SCOLARISES,
DU GROUPE D'AGES ET DE L'INDICE DE SCOLARISATION
DANS L'ENSEIGNEMENT DU SECOND DEGRE (1951-55 A 1961-65)
(Base 100 EN 1951-55)

INCREASE IN SCHOOL ENROLMENTS,
IN AGE-GROUP AND IN RATIO OF ENROLMENTS
WITHIN SECOND-LEVEL EDUCATION (1951-55 TO 1961-65)
(1951-55 = 100)

*Croissance effectifs
Increase in enrolments*

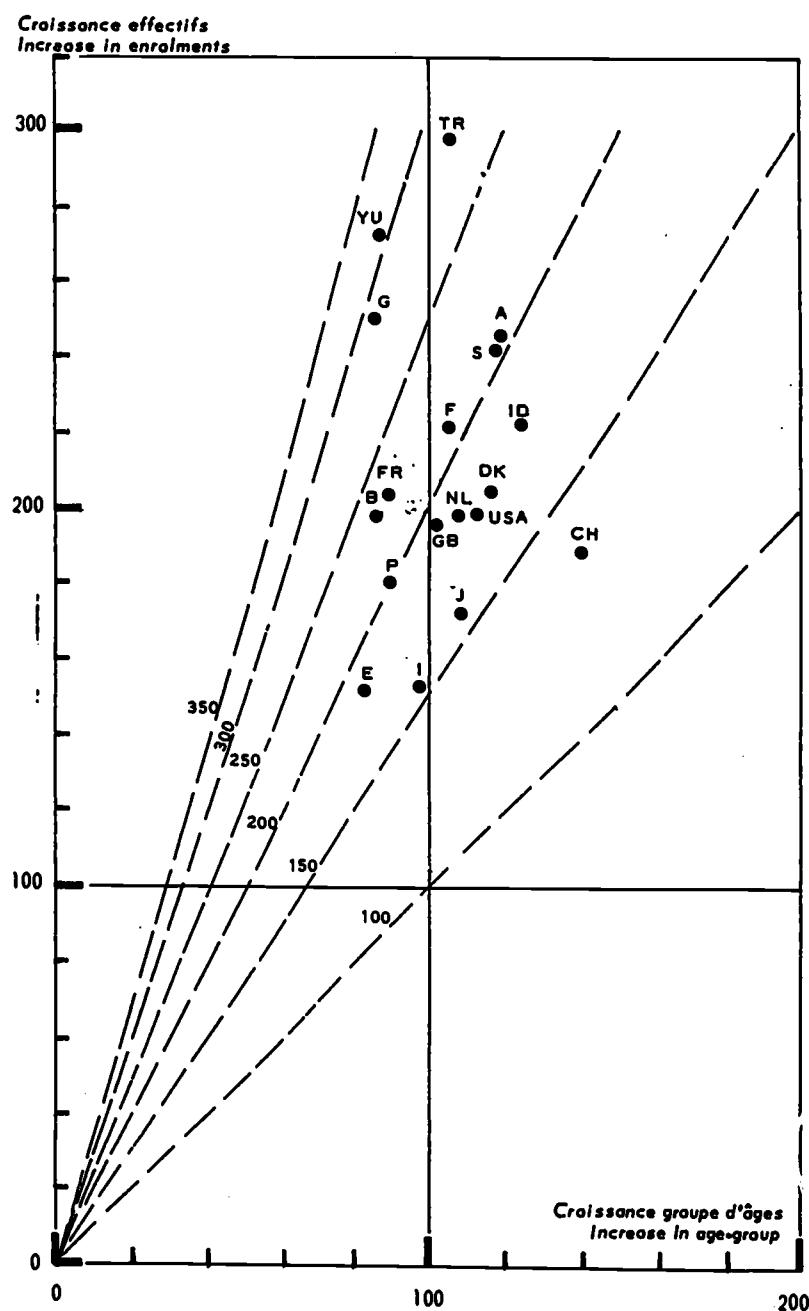


Sources : Effectifs : Tableau VI - Enrolments : Table VI.
Groupe d'âges : Tableau XIII - Age-group : Table XIII.

Graphique X - Graph X

CROISSANCE DES EFFECTIFS SCOLARISES,
DU GROUPE D'AGES ET DE L'INDICE DE SCOLARISATION
DANS L'ENSEIGNEMENT DU TROISIEME DEGRE (1951-55 A 1961-65)
(Base 100 EN 1951-55)

INCREASE IN SCHOOL ENROLMENTS,
IN AGE-GROUP AND IN RATIO OF ENROLMENTS
WITHIN THIRD-LEVEL EDUCATION (1951-55 TO 1961-65)
(1951-55 = 100)



Sources : Effectifs : Tableau VI - Enrolments : Table VI.
Groupe d'âges : Tableau XIII - Age-group : Table XIII.

The absolute increase in numbers is thus divided into three parts:

- ΔP is the increase due to demographic changes;
- $P \cdot \Delta W$ is the increase due to changes in the enrolment ratio;
- $\Delta P \cdot \Delta W$ is the increase due to the combined effect of demographic changes and changes in the enrolment ratio.

If we now take s , p , and w as the annual rate of increase of S , P and W , expression (1) may be read:

$$s = p + w + pw \quad (2)$$

In this latter expression, the combined effect pw is practically negligible, which is not necessarily the case for $\Delta P \cdot \Delta W$ (1). We have finally made two series of calculations using each formula:

(a) The first series of calculations according to expression (1) is presented in Tables XIX (second level) and XX (third level). It concerns the rise in enrolments between 1950 and 1965. Table XXI shows the absolute percentage increase in enrolments which is attributable to the rise in the enrolment ratio. Some percentages are above 100, which simply means that the size of the age-group has diminished. Except in Germany and Austria, the effect due to the enrolment ratio is everywhere greater in higher education than in secondary education; it is also greater in higher education and in all countries (except Switzerland) than the demographic effect. On the other hand, it is greater in secondary education in 14 countries out of 23.

(b) The annual rates of increase in S , P and W are shown in Table XXII. They have been calculated on the basis of periods 1951-55 and 1961-65 in order as far as possible to avoid fluctuations due to the choice of a single base year. As can be seen, the result is practically that $s \approx w + p$. (2)

The conclusions which may be drawn from this table supplement those of the three preceding tables. The rates of increase w in primary education are very small apart from four countries to which we have already drawn attention in connection with Graph VIII. The rates w in higher education are greater than in secondary education

- (1) Various methods have been suggested for distributing combined effects $\Delta P \cdot \Delta W$ between the two pure effects. They all have the disadvantage of being arbitrary and of leading to results which are sometimes very different. The reader is referred in this connection to Annex Q of Volume II in Education, Human Resources and Development in Argentina, O.E.C.D., 1968.
- (2) The deviation between s and $w + p$ is due not only to the combined effect but also to errors in rounding off the figures, since the rates have been calculated directly from the ratios in Tables VI, XIII and XVIII.

TABLE XII - Increase in enrolments at the second level, from 1950 to 1965, due to changes in the age-group and enrolment ratio

	S_{50}	S_{65}	P_{50}	P_{65}	ΔS_5	ΔP	ΔA	$\Delta \Delta$	$\Delta \Delta'$	$\Delta \Delta''$	$\Delta \Delta'''$
GERMANY	2.619	3.523	0.62	0.75	-0.973	-0.295	-0.123	-1.125	-0.24	-0.27	-0.27
AUSTRIA	2.171	2.93	1.193	1.416	0.605	0.452	0.123	1.125	0.24	0.27	0.27
BELGIUM	1.056	1.62	0.416	0.464	0.588	0.367	0.147	0.75	0.16	0.16	0.16
FRANCE	1.059	5.29	1.124	1.36	0.837	0.332	0.241	0.75	0.16	0.16	0.16
LUXEMBOURG	2.36	1.100	1.36	1.36	0.332	0.324	0.125	0.25	0.06	0.06	0.06
NETHERLANDS	2.70	4.08	1.36	2.26	0.332	0.431	0.327	0.25	0.11	0.11	0.11
SWITZERLAND	2.07	2.05	0.655	0.897	0.125	0.435	0.355	0.25	0.11	0.11	0.11
DENMARK	1.22	2.07	0.67	0.74	0.314	0.314	0.114	0.25	0.06	0.06	0.06
PHILIPPINES	1.43	5.17	0.67	0.72	0.319	0.319	0.114	0.25	0.06	0.06	0.06
ICELAND	1.43	17.5	2.04	4.24	0.294	0.294	0.114	0.25	0.06	0.06	0.06
NORWAY	2.152	1.61	3.45	4.18	0.357	0.359	0.114	0.25	0.06	0.06	0.06
UNITED KINGDOM	1.61	5.26	1.106	2.82	0.357	0.359	0.114	0.25	0.06	0.06	0.06
SWEDEN	5.26	1.106	3.45	5.16	0.357	0.359	0.114	0.25	0.06	0.06	0.06
SPAIN	1.43	5.17	0.67	0.74	0.314	0.314	0.114	0.25	0.06	0.06	0.06
GREECE	1.43	3.05	0.67	0.74	0.314	0.314	0.114	0.25	0.06	0.06	0.06
ITALY	1.43	3.12	0.67	0.74	0.314	0.314	0.114	0.25	0.06	0.06	0.06
PORTUGAL	1.43	7.22	0.67	0.74	0.314	0.314	0.114	0.25	0.06	0.06	0.06
TURKEY	2.35	3.04	0.67	0.74	0.314	0.314	0.114	0.25	0.06	0.06	0.06
YUGOSLAVIA	2.35	1.32	1.06	1.36	0.314	0.314	0.114	0.25	0.06	0.06	0.06
CANADA	2.35	13.00	21.35	21.35	0.314	0.314	0.114	0.25	0.06	0.06	0.06
UNITED STATES	6.32	7.26	11.06	17.26	0.314	0.314	0.114	0.25	0.06	0.06	0.06
JAPAN											

Source : For S, see Table II - for P, see Annex I, Table I.

Note : Increase ΔS_5 is not exactly equal to the difference between S_{65} and S_{50} because of the error in rounding off.**TABLE XIII** - Increase in enrolments at the third level, from 1950 to 1965, due to changes in the age-group and the enrolment ratio

	S_{50}	S_{65}	P_{50}	P_{65}	ΔS_5	ΔP	ΔA	$\Delta \Delta$	$\Delta \Delta'$	$\Delta \Delta''$	$\Delta \Delta'''$
GERMANY	1.55	2.15	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
AUSTRIA	2.15	3.05	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
BELGIUM	3.05	5.17	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
FRANCE	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
LUXEMBOURG	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
NETHERLANDS	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
SWITZERLAND	2.06	12.0	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
DENMARK	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
FINLAND	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
IRELAND	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
ICELAND	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
NORWAY	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
UNITED KINGDOM	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
SWEDEN	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
SPAIN	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
GREECE	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
ITALY	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
PORTUGAL	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
TURKEY	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
YUGOSLAVIA	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
CANADA	1.57	1.57	0.76	1.10	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
UNITED STATES	2.29	2.29	1.56	1.56	-0.15	-0.05	0.02	0.50	0.14	0.14	0.14
JAPAN											

Source : For S, see Table II - for P, see Annex I, Table I.

Note : The increase ΔS_5 is not exactly equal to the difference between S_{65} and S_{50} because of the error in rounding off.

TABLE XXI - Proportion of the Increase in Enrolments in 2nd and 3rd Levels Attributable to the Rise in Enrolment Ratios

	2nd level	3rd level
GERMANY	123	80
AUSTRIA	99	80
BELGIUM	93	120
FRANCE	94	115
LUXEMBOURG	53	120
NETHERLANDS	52	50
SWITZERLAND	14	50
DENMARK	59	65
FINLAND	52	86
IRELAND	125	127
ICELAND	21	50
NORWAY	46	50
UNITED KINGDOM	55	50
SWEDEN	51	50
SPAIN	50	120
GREECE	11	120
ITALY	50	120
PORTUGAL	101	110
TURKEY	55	78
YUGOSLAVIA	55	124
CANADA	55	74
UNITED STATES	52	75
JAPAN	52	75

Source : Based on Tables XIX and XX (Proportion of P.AW in A.S.).**TABLE XXII - Annual Growth Rate of Enrolments in the Age-group and of Enrolment Ratios in the Three Levels of Education (from 1951-55 to 1961-65) (%)**

	1st level			2nd level			3rd level		
	s	w	p	s	w	p	s	w	p
GERMANY	- 0,2	- 0,1	0,3	- 0,1	1,2	- 1,1	8,3	6,6	2,3
AUSTRIA	- 0,4	0,2	- 0,0	2,0	2,2	- 0,3	8,4	7,4	1,6
BELGIUM	2,2	0,1	2,0	3,0	2,0	1,0	7,1	8,0	- 1,1
FRANCE	2,2	- 1,0	2,2	3,0	4,0	2,2	7,4	8,0	- 1,1
LUXEMBOURG	2,1	0,1	2,0	1,0	2,2	1,4	7,0	7,5	- 1,2
NETHERLANDS	0,7	- 0,7	1,0	5,5	2,4	2,2	7,1	7,5	0,0
SWITZERLAND	1,0	0,0	1,1	1,0	1,2	2,2	7,0	7,0	2,4
DENMARK	1,3	1,1	- 0,5	1,0	2,5	2,2	7,4	7,7	1,1
FINLAND	0,7	- 0,5	1,1	2,0	4,5	3,2	7,0	7,0	1,1
IRELAND	- 0,2	- 0,4	0,5	2,0	2,4	0,1	7,0	7,0	- 1,0
ICELAND	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
NORWAY	1,0	- 0,3	1,2	2,4	3,8	3,4	7,0	7,0	0,2
UNITED KINGDOM	- 0,3	- 1,0	0,0	4,1	2,2	1,8	7,0	7,0	0,8
SWEDEN	1,2	1,6	- 0,3	4,3	1,8	2,5	9,3	7,3	1,8
SPAIN	1,5	0,4	1,1	7,0	7,1	0,7	7,1	7,1	- 1,0
GREECE	0,3	0	0,0	0,0	0,0	0,4	9,6	11,0	- 1,0
ITALY	0,2	0,1	0,1	7,0	7,0	0	4,4	4,6	- 0,1
PORTUGAL	1,4	0,6	0,9	10,2	10,0	1,1	7,2	7,2	- 1,0
TURKEY	2,2	3,0	4,1	12,5	9,5	2,7	11,5	10,4	0,7
YUGOSLAVIA	4,5	2,7	1,9	7,4	7,2	0,1	10,5	12,2	- 1,3
CANADA	4,0	0,2	4,0	9,1	4,5	4,5	11,2	9,6	1,4
UNITED STATES	3,0	- 0,1	3,2	5,4	7,0	3,5	7,1	7,2	1,2
JAPAN	- 0,4	0	- 0,4	3,2	2,0	1,2	5,6	4,7	0,9

Sources : s : based on Table VI
 p : based on Table XIII
 w : based on Table XVIII

except in three Mediterranean countries (Spain, Italy and Portugal). They are also, apart from a few exceptions (Switzerland for higher education; and Luxembourg, the Netherlands and Denmark for secondary education), always greater than the rate of increase in the age-group.

(c) It may be assumed, lastly, that a relatively small population growth encourages a relatively high increase in enrolments. The correlation between w and p should therefore be negative in this case. This assumption may be examined in Graphs XI (secondary education) and XII (higher education). In secondary education, the correlation is almost nil ($r = -0.12$); if we discount the Mediterranean countries, which are quite isolated in the upper part of the graph, the correlation becomes positive ($r = 0.46$). It is plausible that this result is due to the fact that some pupils covered by compulsory school attendance are in secondary education, and that the legal extension of compulsory school attendance could also tend in many countries to cover a good portion of the period of study at second level. In higher education, on the other hand, the correlation falls in line with the assumption ($r = -0.53$ or -0.63 , according to whether the Mediterranean countries are included or not).

45. As the rise in the postwar birthrate reaches higher education towards the end of the period analysed in this study, it may well be asked whether the rise in the enrolment ratio will not now tend to fall in the '70s.

E. Enrolment ratios and enrolment rates

46. We have defined the enrolment ratio as being the ratio between S enrolments at a level of study and the population P of the corresponding age-group:

$$w = \frac{S}{P}$$

If we take as numerator enrolment S' corresponding exactly to the age limits of population P (whatever the level of study of these enrolments), we obtain the enrolment rate w' of the age-group concerned:

$$w' = \frac{S'}{P}$$

For the same academic year, we have:

$$\frac{w'}{w} = \frac{S'}{S}$$

and for two academic years separated in time (indexed 1 and 0 below on the right of the symbols):

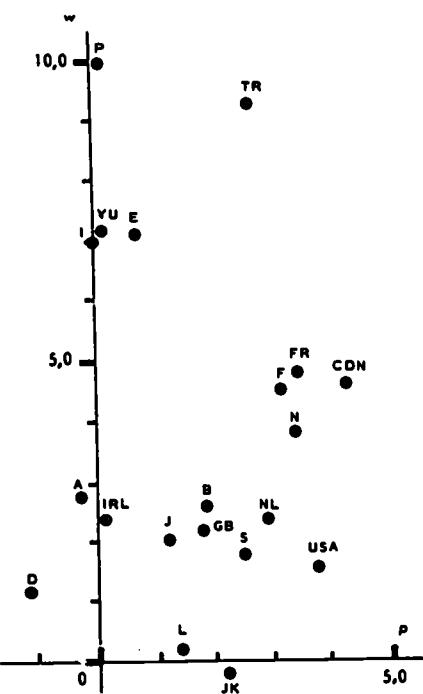
$$\frac{w'_1/w'_0}{w_1/w_0} = \frac{S'_1/S'_0}{S_1/S_0} = \frac{S'_1/S_1}{S'_0/S_0}$$

Graphique XI - Graph XI

Graphique XI - Graph XI

TAUX DE CROISSANCE ANNUEL DE L'INVOICE
DE SCOLARISATION (w) ET DU GROUPE D'AGES (p)
DANS L'ENSEIGNEMENT DU SECOND DEGRE (1951-55 A 1961-65)

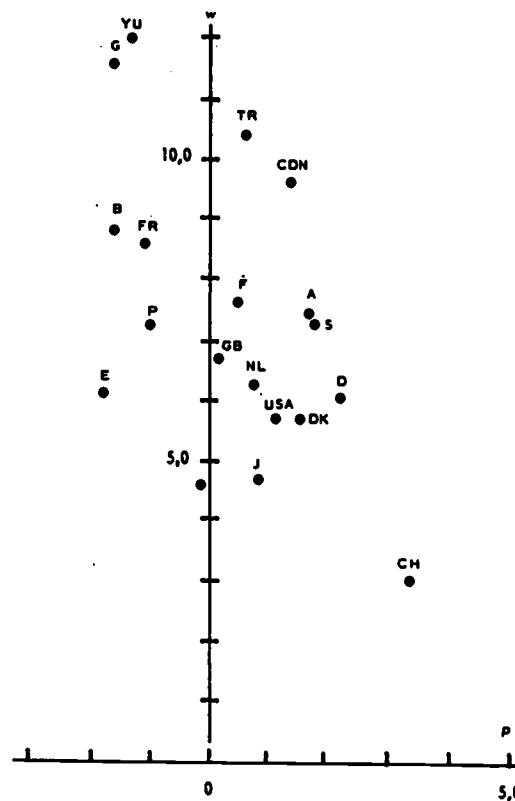
ANNUAL INCREASE IN RATIO OF ENROLMENTS (w)
AND IN AGE-GROUP (p) WITHIN
SECOND-LEVEL EDUCATION (1951-55 TO 1961-65)



Source : Tableau XXII - Table XXII.

TAUX DE CROISSANCE ANNUEL DE L'INVOICE
DE SCOLARISATION (w) ET DU GROUPE D'AGES (p)
DANS L'ENSEIGNEMENT DU TROISIÈME DEGRE (1951-55 A 1961-65)

ANNUAL INCREASE IN RATIO OF ENROLMENTS (w)
AND IN AGE-GROUP (p) WITHIN
THIRD-LEVEL EDUCATION (1951-55 TO 1961-65)



Source : Tableau XXII - Table XXII.

' and 'W' may therefore be very different and their increase over the course of time may also be very different.

In order to illustrate this analysis, we shall compare the ratios and rates for the countries where the two calculations are possible; we shall therefore begin by considering the data available.

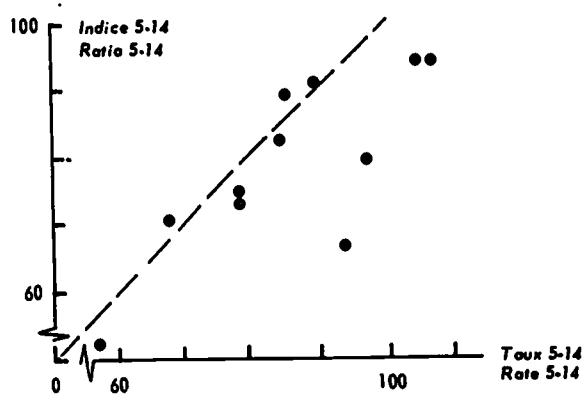
47. In point of fact, the enrolment rates are only sufficiently detailed for the whole of the period in the United States and the Netherlands. They may be calculated on the basis of 1957 in the case of Belgium and 1958 in the case of France. Some rates are scattered over the course of time for other countries and for others again only incomplete data exist which leave out higher education enrolments, for example. In short, a comparative study based only on enrolment rates and their trend is practically impossible.

48. Table XXIII gives for 1960 (or the nearest year) the enrolment rates for a few age-groups and the enrolment ratios. These rates and ratios are taken up in Graphs XIII to XVII; if there were equality between the two, the points would be grouped on the line bisecting the axes. In secondary education (Graph XIV), the ratio is always lower than the rate since the latter includes some enrolments at first level (1). In higher education, the ratio is higher than the rate (2) since enrolments are greater than the 20-24 age-group. On the other hand, the ratios for primary and secondary education combined (Graph XV) and for total enrolments (Graph XVII), as well as to a smaller extent the ratio for primary education (Graph XIII) are nearer the corresponding rates. Thus in these last cases the grading of countries in relation to each other is better respected, as demonstrated by the coefficient of correlation of ranks between the grading resulting from the ratio and that resulting from the rate:

1st level	:	0.63
2nd level	:	0.51
1st and 2nd levels	:	0.92
3rd level	:	0.53
Total enrolments	:	0.86

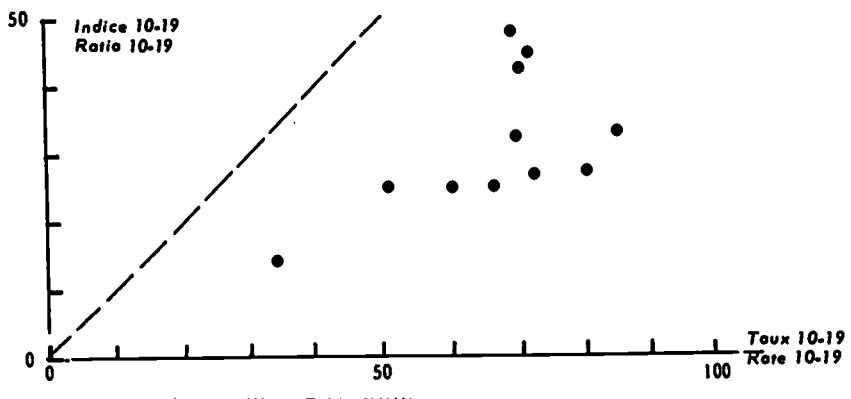
-
- (1) If the ratio for secondary education had been calculated in relation to the 15-19 age-group, the ratio would have been higher than the rate; we have verified that the deviation would have been as wide.
- (2) Except in Portugal. The rate in this country for the 20-24 age-group shown in Table XXIII seems high. This figure is due to the 1960 census, which gives an enrolment of 33,600 for the 20-24 age-group, whereas higher education enrolments for the same year 1960 are 25,200. In any event, the rates resulting from population censuses are generally higher than those obtained from education censuses.

Graphique XIII - Graph XIII
INDICES DE SCOLARISATION ET TAUX DE SCOLARISATION POUR L'ENSEIGNEMENT DU PREMIER DEGRE
RATIOS OF ENROLMENT AND ENROLMENT RATES IN FIRST-LEVEL EDUCATION



Source : Tableau XXIII - Table XXIII.

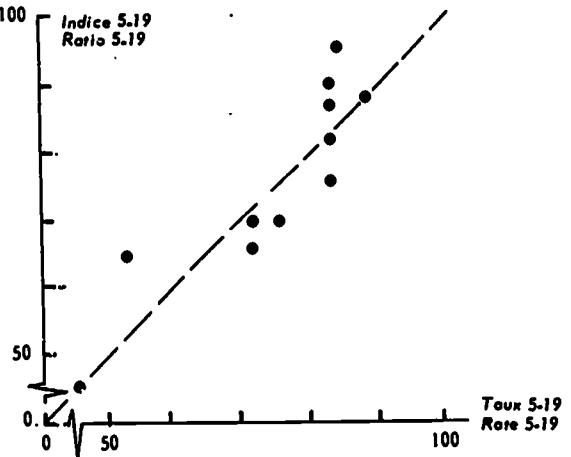
Graphique XIV - Graph XIV
INDICES DE SCOLARISATION ET TAUX DE SCOLARISATION POUR L'ENSEIGNEMENT DU SECONDE DEGRE
RATIOS OF ENROLMENT AND ENROLMENT RATES IN SECOND-LEVEL EDUCATION



Source : Tableau XXIII - Table XXIII.

Graphique XV - Graph XV

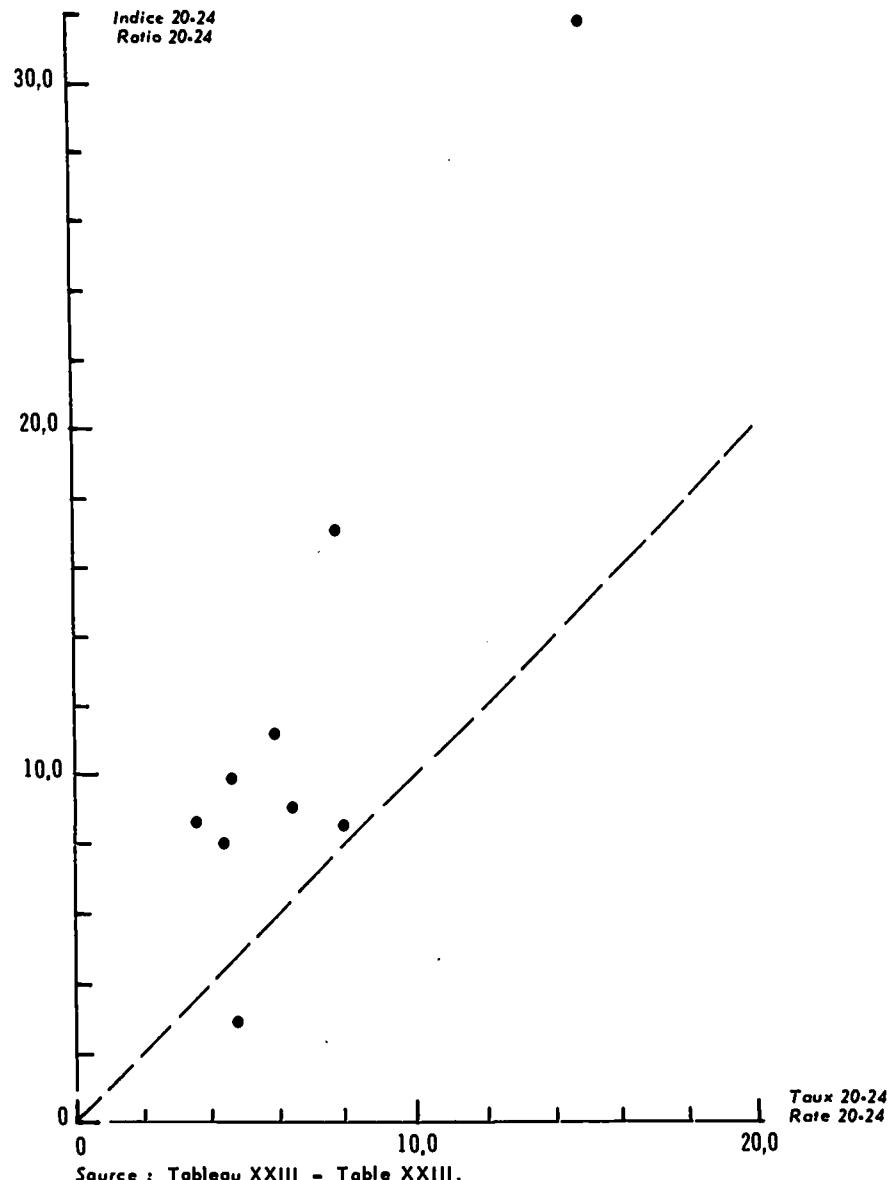
INDICES DE SCOLARISATION ET TAUX DE SCOLARISATION POUR LES ENSEIGNEMENTS DES 1^{er} ET 2^e DEGRES
RATIOS OF ENROLMENT AND ENROLMENT RATES IN FIRST-LEVEL AND SECOND-LEVEL EDUCATION



Source : Tableau XXIII - Table XXIII.

Graphique XVI - Graph XVI

INDICES DE SCOLARISATION ET TAUX DE SCOLARISATION POUR L'ENSEIGNEMENT DU TROISIEME DEGRE
RATIOS OF ENROLMENT AND ENROLMENT RATES IN THIRD-LEVEL EDUCATION



Graphique XVII - Graph XVII

INDICES DE SCOLARISATION ET TAUX DE SCOLARISATION

POUR LES EFFECTIFS TOTAUX

RATIOS OF ENROLMENT AND ENROLMENT RATES FOR ALL LEVELS

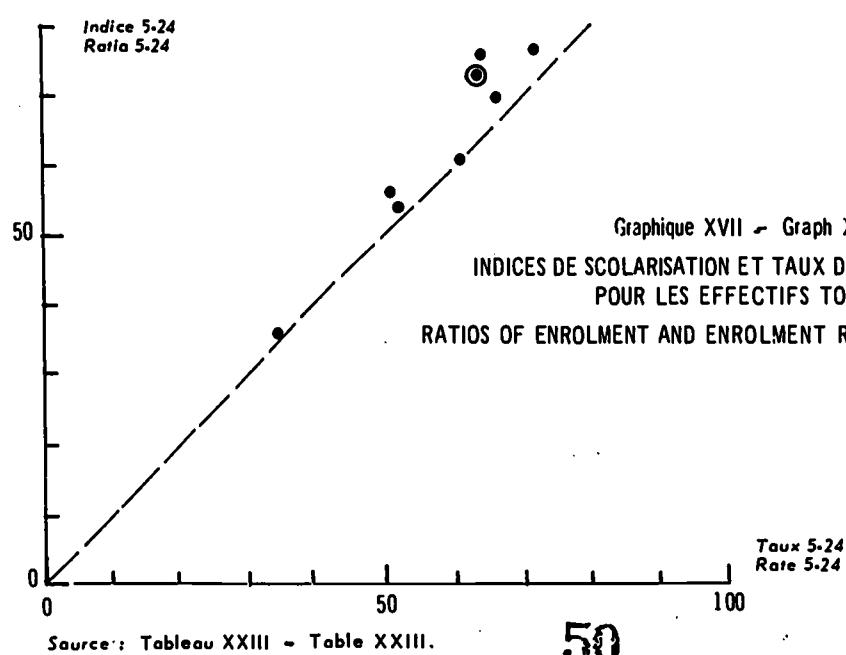


TABLE XXXIII - Enrolment rates and enrolment ratios towards 1950
(as a percentage of the age-group)

	Enrolment rates						Enrolment ratios						
	5-9	10-14	15-19	20-24	5-14	10-19	5-19	5-24	1st level	2nd level	1st & 2nd levels	3rd level	Total enrolments
AUSTRIA (1960)	79	92	31	4,3	85	60	72	51	82	25	70	8,0	56
BELGIUM (1960)	100	94	39	6,4	97	70	84	64	94	43	95	9,1	76
FRANCE (1960)	98	93	33	4,6	95	69	83	64	94	33	90	9,9	73
NETHERLANDS (1961)	97	96	38	5,9	97	69	83	64	79	48	87	11,2	73
NORWAY (1957)	61	97	37	9,3	79	72	76	57	73	27	70	...	...
SWEDEN (1960)	60	96	35	8,0	79	66	72	52	74	25	66	8,6	54
ITALY (1959)	57	77	21	...	68	51	53	...	70	25	65	6,5	50
PORTUGAL (1960)	61	52	13	4,8	57	34	46	35	52	14	46	2,9	36
CANADA (1961)	75	97	58	7,9	86	80	83	66	89	27	82	17,0	70
UNITED STATES (1960)	83	97	69	14,6	90	85	88	72	91	33	88	31,8	77
JAPAN (1960)	90	98	39	3,5	94	71	83	61	66	45	76	8,6	61

Sources : (1) For rates : World Survey of Education, UNESCO (Norway, Sweden and Japan); U.N. Demographic Yearbook, 1963 (Portugal, Canada and United States); Belgieum : Annuaire Statistique de l'Enseignement, 1960-61; France : Tableaux de l'Education nationale, 1966 ; Netherlands : De ontwikkeling van het onderwijs in Nederland, 1966 ; Italy : Sistemi di Istruzione, 1963 ; Austria : Educational Policy and Planning, Austria, OECD, 1968

(2) For ratios : see Annex I, Tables IX to XIII.

49. We shall now compare the respective increases in the ratio and rate of enrolments. These increases are calculated in Table XXIV, to which Graphs XVIII to XXII correspond. Here, too, the points should be situated on the bisecting line of each graph if the increases were equal, which is only approximately the case for the same ratios and rates as in the preceding graphs. The correlation of ranks is as follows:

1st level	: 0.47
2nd level	: 0.46
1st and 2nd levels	: 0.74
3rd level	: 0.55
Total enrolments	: 0.96

These correlations seem to be even poorer than the preceding, but there are really too few countries for any definite conclusion to be drawn.

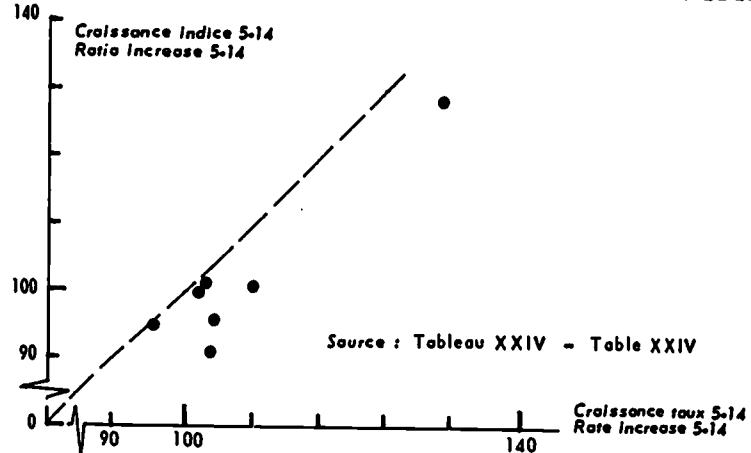
50. In short, enrolment rates and their increase cannot be estimated precisely enough from the enrolment ratios. The least erroneous are those calculated for very aggregate age-groups (5-19 and 5-24). Unfortunately, an additional source of error here is introduced by the change over the course of time in the population structure.

51. In Table XXV, we have, as an illustration, calculated the enrolment rates by 5-year age-groups in France for 1961 and 1964. This shows that all the partial rates increase while the 5-24 rate falls. Similarly, Table XXIV shows that the enrolment rate in secondary education fell in France between 1958 and 1965 (from 66.9 per cent to 66.2 per cent), whereas in fact there was an overall increase in the rates for single years of age, sometimes considerable, during the same period (see Table XXVI). This is explained by the fact that the postwar disturbance in the birth-rate produced a larger age-group in 1965 than in 1958.

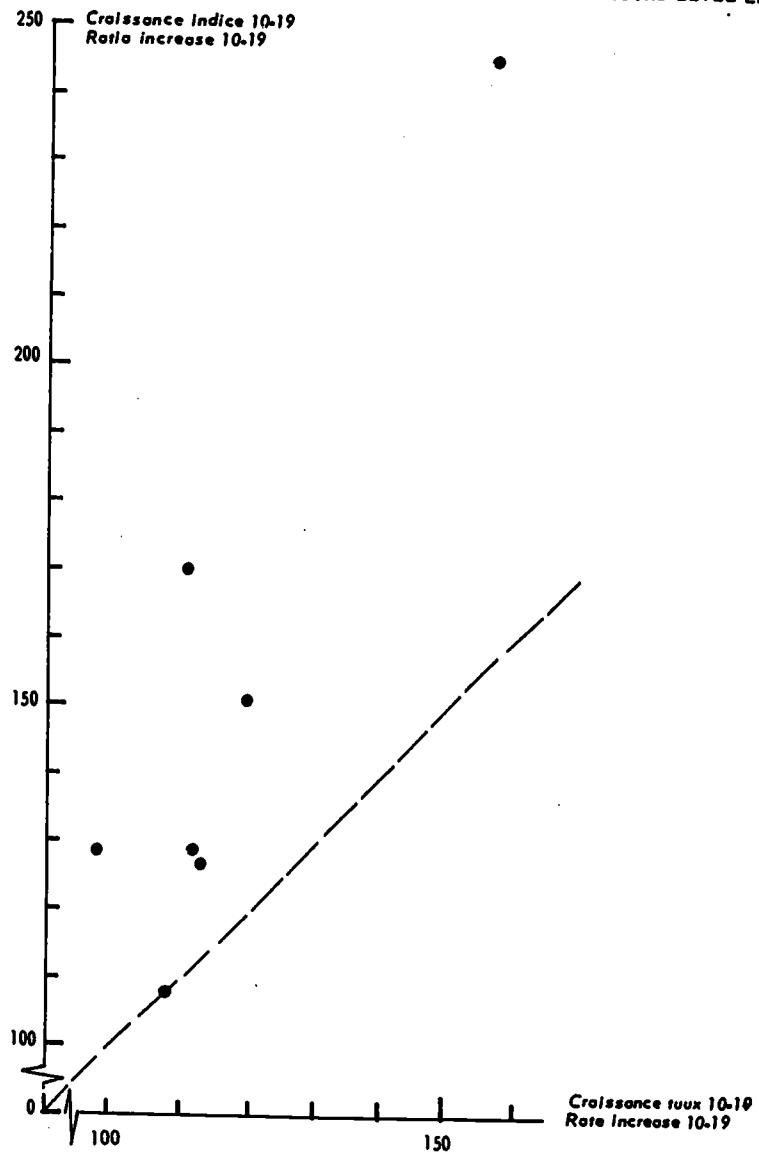
52. This difficulty in handling the aggregate rates, which is very familiar to the demographers, may be partially overcome by calculating fictitious rates on the basis of a population whose structure does not vary. For example, by applying the 1965 enrolment rates to the 1958 population, we find (see Table XXVI) a fictitious 10-19 rate in 1965 of 71.5 per cent (therefore an increase - instead of a fall - of 6.9 per cent over the real rate for 1958 of 66.9 per cent). However, it is just as feasible to apply the 1958 rates to the 1965 population and to find for 1958 a fictitious rate of 60.8 per cent, i.e. this time a higher increase of 8.9 per cent over the real rate of 66.2 per cent in 1965.

The conclusions may therefore be different according to the population sample chosen. Moreover, the risk of reaching an arbitrary conclusion is still greater when comparing countries with each other instead of confining the comparisons to the country itself.

Graphique XVIII - Graph XVIII
CROISSANCE DE L'INDICE DE SCOLARISATION ET DU TAUX DE SCOLARISATION
POUR L'ENSEIGNEMENT DU PREMIER DEGRE
INCREASE IN RATIO OF ENROLMENTS AND IN ENROLMENT RATES FOR FIRST-LEVEL EDUCATION

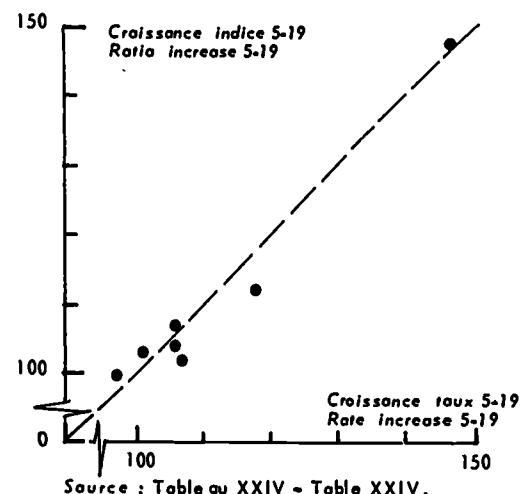


Graphique XIX - Graph XIX
CROISSANCE DE L'INDICE DE SCOLARISATION ET DU TAUX DE SCOLARISATION
POUR L'ENSEIGNEMENT DU SECOND DEGRE
INCREASE IN RATIO OF ENROLMENTS AND IN ENROLMENT RATES FOR SECOND-LEVEL EDUCATION



Graphique XX - Graph XX

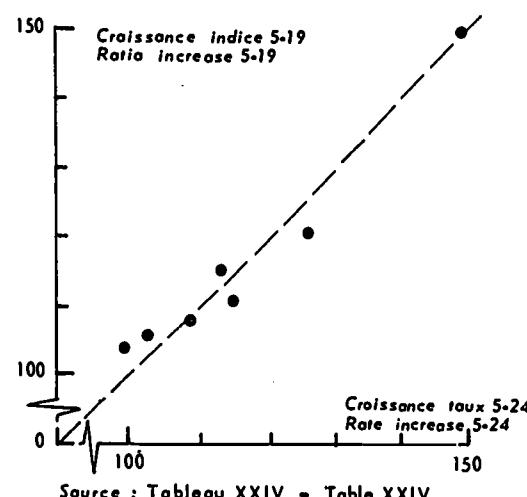
CROISSANCE DE L'INDICE DE SCOLARISATION ET DU TAUX DE SCOLARISATION POUR LES ENSEIGNEMENTS DES 1^{er} ET 2^e DEGRES
INCREASE IN RATIO OF ENROLMENTS AND IN ENROLMENT RATES
FOR FIRST-LEVEL AND SECOND-LEVEL EDUCATION



Source : Tableau XXIV - Table XXIV.

Graphique XXII - Graph XXII

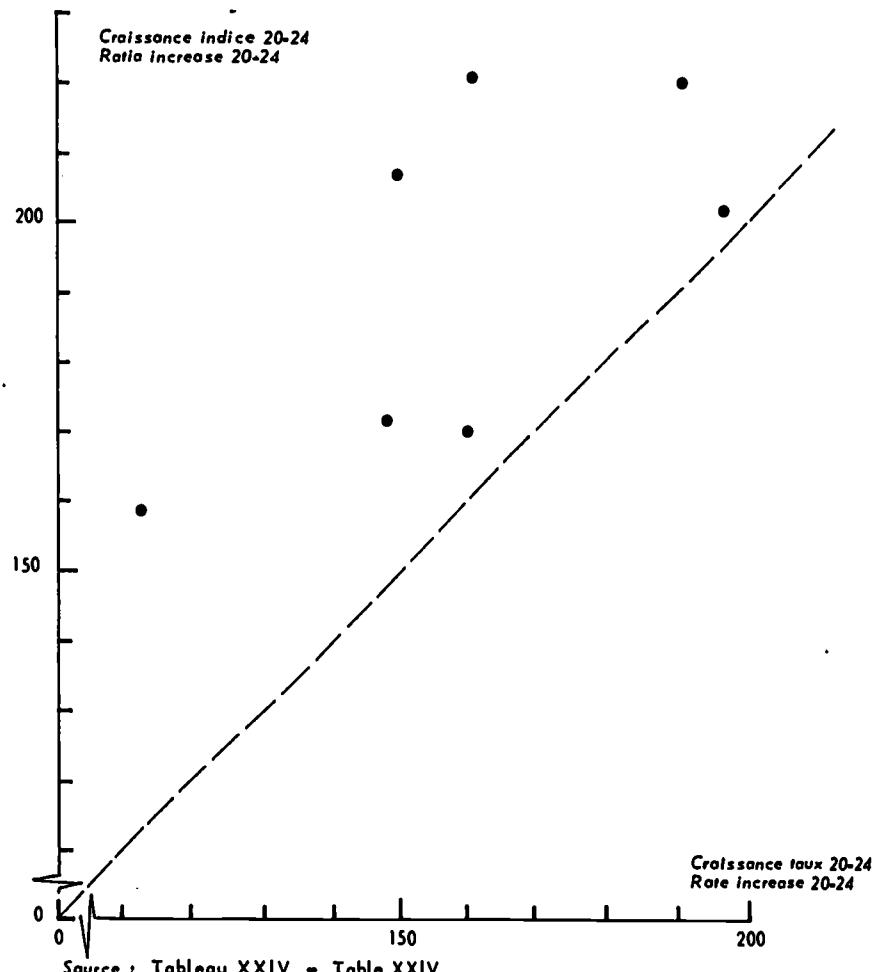
CROISSANCE DE L'INDICE DE SCOLARISATION ET DU TAUX DE SCOLARISATION POUR LES EFFECTIFS TOTAUX
INCREASE IN RATIO OF ENROLMENTS
AND IN ENROLMENT RATES FOR ALL LEVELS



Source : Tableau XXIV - Table XXIV.

Graphique XXI - Graph XXI

CROISSANCE DE L'INDICE DE SCOLARISATION ET DU TAUX DE SCOLARISATION
POUR L'ENSEIGNEMENT DU TROISIEME DEGRE
INCREASE IN RATIO OF ENROLMENTS AND IN ENROLMENT RATES FOR THIRD-LEVEL EDUCATION



Source : Tableau XXIV - Table XXIV.

TABLE XXIV - Compared growth of the enrolment ratio and the enrolment rate
(% and %' in percentage of the age-group)

	w_0	w_1	w_1/w_0	w'_0	w'_1	w'_1/w'_0
AUSTRIA (1950-1965)						
1	86,9	82,8	.95	88,3	85,2	96
2	17,6	29,9	170	57,2	63,4	111
3	4,3	8,9	207	3,6	5,4	150
1 + 2	72,5	75,0	103	68,5	69,2	101
1 + 2 + 3	56,3	58,8	104	52,6	52,7	100
BELGIUM (1956-1965)						
1	95,8	97,1	101	95,7	98,5	103
2	35,7	45,2	127	63,3	71,3	113
3	6,3	15,2	220	4,7	9,0	191
1 + 2	88,7	95,1	107	76,6	81,4	106
1 + 2 + 3	68,4	78,9	115	59,0	66,4	113
FRANCE (1958-1965)						
1	93,4	93,4	100	95,7	97,4	102
2	50,1	38,7	129	66,9	66,2	99
3	8,6	17,4	202	3,8	7,5	197
1 + 2	87,0	87,1	100	78,7	77,4	98
1 + 2 + 3	69,6	74,1	106	62,1	63,8	103
NETHERLANDS (1953-1961)						
1	86,4	79,1	.91	92,8	96,7	104
2	37,3	48,0	129	61,3	68,9	112
3	6,5	11,2	172	4,0	5,9	148
1 + 2	84,0	87,2	104	73,9	78,5	106
1 + 2 + 3	67,8	73,5	108	58,5	64,0	109
PORUGAL (1950-1960)						
1	40,4	52,3	129	40,7	56,7	139
2	5,6	13,7	245	21,5	33,7	157
3	2,0	3,4	170	3,0	4,8	160
1 + 2	30,7	45,5	148	29,4	43,2	147
1 + 2 + 3	23,8	35,6	150	23,1	34,6	150
CANADA (1951-1961)						
1	88,2	89,3	101	77,5	85,5	110
2	18,0	27,1	151	67,6	80,2	119
3	7,7	17,0	221	4,9	7,9	161
1 + 2	73,2	82,1	112	66,6	78,3	118
1 + 2 + 3	57,9	70,3	121	52,2	65,6	126
UNITED STATES (1950-1960)						
1	94,9	91,3	.96	86,6	90,0	104
2	30,0	32,5	108	78,6	85,0	108
3	20,0	31,8	159	12,9	14,6	113
1 + 2	84,8	86,7	102	78,7	84,4	107
1 + 2 + 3	68,7	76,6	111	62,5	71,7	115

Source : Cf. Table XXII.

TABLE XXV - Enrolment Rates by five-year age-groups in France (1961-62 and 1964-65)
 S' P : thousands
 W' : %

	1961-62			1964-65		
	S'	P	W'	S'	P	W'
5-9	3.932,7	4.020,9	97,8	4.083,4	4.113,4	99,3
10-14	3.865,5	4.171,3	92,7	3.887,2	4.145,9	93,8
15-19	1.118,9	3.143,4	35,6	1.554,0	4.056,3	38,3
20-24	154,5	2.755,2	5,6	216,8	2.925,1	7,4
Total	9.071,6	14.090,8	64,4	9.741,4	15.240,7	63,9

Source : Tableaux de l'Education nationale, 1966

**TABLE XXVI - Enrolment Rates for single years of age between 10 and 19 in France
 in 1958-59 and in 1965-66**

S' P : thousands
 W' : %

	1958/59			1965/66		
	S'	P	W'	S'	P	W'
10 years	834,6	835,5	99,9	822,9	821,2	100,2
11 years	826,8	831,0	99,5	820,4	824,2	99,5
12 years	787,8	798,2	98,7	811,3	812,3	99,9
13 years	583,0	600,4	97,1	817,8	830,4	98,5
14 years	402,5	589,4	68,3	613,9	825,4	74,4
15 years	310,7	586,3	53,0	514,9	859,3	59,9
16 years	236,2	543,8	43,4	451,5	864,0	52,2
17 years	137,9	490,9	28,1	331,8	867,5	38,3
18 years	85,5	520,2	16,4	228,5	867,6	26,3
19 years	56,8	572,0	9,9	152,4	836,2	18,2
Total	4.261,8	6.367,7	66,9	5.565,4	8.408,1	66,2

Source : Tableaux de l'Education nationale, 1966

CHAPTER IVTHE INCREASE IN ENROLMENTS BETWEEN 1965 AND 1980

53. We endeavour in the present Chapter to estimate enrolments up to 1980 on the assumption that the educational system will develop until then in accordance with certain trends prevailing between 1950 and 1965.

54. The method of extrapolation used is based on a strictly deductive methodological approach and not on the probability nor even necessarily the possibility of maintaining past trends in the future. On the contrary, this assumption is even doubtful for several countries. In this sense, it must be clear that the estimates which follow are not forecasts. Nor of course do they constitute any attempt to define a desirable trend.

55. We have not taken account of the national forecasts made in several Member countries nor even of the projected reforms now known, especially as regards the extension of compulsory school attendance. These forecasts and projects generally imply the desire to change past trends, which is by assumption not one of our own preoccupations. Our results therefore certainly differ from national work, although no value judgement, whether favourable or unfavourable, can be deduced from these results concerning such work.

56. Our estimates are not therefore necessarily probable, necessarily possible or necessarily desirable; of what interest can they be in these circumstances? They are simply intended to amplify (possibly even over-exaggerating) the consequences of the analyses in preceding Chapters with a view to highlighting certain important points. We also hope in this way to provide some sort of answer to the question which is often asked: is it possible to continue in the future the considerable efforts made in the past?(1)

57. From the point of view of methods, the ideal would be to build up stocks of enrolments on the basis of the trend in the successive cycles of study of the annual mass of new entries, allowing for repeaters and dropouts. Since this method is inapplicable for lack of sufficient data, we are obliged to choose a few parameters which are assumed to be representative. The choice is partly arbitrary and the trends selected do not necessarily coincide with those which would result from another choice.

(1) Similar estimates, also for 1980, concern teachers and financial resources; they are given in the Background Studies prepared for the Conference.

58. We first extrapolated the enrolment ratio for the first level:

$$\left(\frac{\text{First level enrolments}}{\text{Population aged 5 to 14}} \right)$$

which in the light of the population forecasts also available permits an estimate of primary school enrolments. We then extrapolated the ratio between second level enrolments and first level enrolments five years earlier and also the ratio between third level enrolments and second level enrolments five years earlier. Secondary education and higher education enrolments are based on these calculations, allowing for the primary school enrolments previously extrapolated. Adjustments were made by means of the least squares method on the basis of enrolment series from 1950 to 1965.

The technical details of these calculations as well as the detailed results are given in Annex III. For the present, we shall simply give the principal estimates obtained.

59. Table XXVII shows the increase in a few age-groups between 1965 and 1980 as compared with their increase during the preceding 15 years (1).

In the 5-14 age-group corresponding to primary education, the increase is lower after 1965 in roughly half of the countries. However, the falls are generally greater than the rises, e.g. Belgium, France and Canada. On the other hand, in 15 countries out of 21, the 5-19 age-group should increase less rapidly. As opposed to this, the 5-14 age-group shows a faster and sometimes considerable rise in most countries (e.g. Ireland, Turkey, Yugoslavia and Canada).

60. Enrolments in 1980 by level of education are given in Table XXVIII, while Table XXIX shows the distribution between the three levels of the absolute rise in enrolments between 1965 and 1980. This table is the equivalent to Table III covering the period 1950-1965. Table XXVIII only gives the estimate resulting directly from the extrapolation of trends, but Annex III also contains a minimum estimate and a maximum estimate. That is why we have included a margin of variation in the growth index in the last column on the right of the table. This margin is all the greater when the level of study is higher since the uncertainty inherent to each level combines with the uncertainty due to preceding levels of study; it is also greater when the quality of the statistical adjustment is poorer. For some countries, the limits of the index are very high, so that the enrolments given for 1980 are only indicative in value (e.g. higher education in Greece, Turkey and Yugoslavia). The following remarks sum up the results obtained:

(1) These increases are the result of national demographic projections mentioned in Annex III. These projections are extraneous data for us; they are based on methods which are evidently different from those we have ourselves used since they indicate a probable trajectory.

TABLE XXVII - Growth of Some Age-groups between 1950 and 1965 and between 1965 and 1980

(Index 100 for base year)

	5-14		10-19		5-19		20-24	
	1965/50	1980/65	1965/50	1980/65	1965/50	1980/65	1965/50	1980/65
GERMANY	101	110	94	125	102	116	114	100
AUSTRIA	99	124	101	130	103	124	113	100
BELGIUM	133	92	119	105	126	99	85	141
FRANCE	151	109	143	97	146	104	91	135
LUXEMBOURG	132	130	121	126	124	128	88	111
NETHERLANDS	128	129	140	111	134	119	114	125
DENMARK	104	118	130	102	115	109	127	97
FINLAND	121	91	145	82	132	86	108	110
IRELAND	107	120	97	124	100	126	78	160
NORWAY	127	113	149	101	135	107	112	119
UNITED KINGDOM	114	127	121	121	119	122	102	115
SWEDEN	102	124	134	101	116	110	129	92
SPAIN ^a	121	104	103	111	111	106	87	116
GREECE	105	98	94	99	100	98	82	119
ITALY	104	113	101	108	104	109	90	109
PORTUGAL	110	114	99	116	103	116	90	112
TURKEY	172	132	143	147	156	140	121	187
YUGOSLAVIA	118	102	103	103	110	104	86	139
CANADA	175	106	174	117	172	113	124	170
UNITED STATES	162	120	166	119	162	121	119	151
JAPAN	93	107	117	63	104	94	118	85

Source : Annex III

TABLE XXVIII - Enrolment by Level of Education in 1965 and 1980

(thousands)

		Enrolments		Growth	
		1945	1980	Index 1965/1950	Index 1980/1965
GERMANY	1	5.607	6.202	89	111
	2	3.565	5.338	135	150
	3	3.668	1.018	273	277
Total		9.540	12.558	105	132
AUSTRIA	1	868	1.168	94	135
	2	293	526	171	180
	3	48.8	123	232	252
Total		1.210	1.817	109	150
BELGIUM	1	1.432	1.398	148	98
	2	642	974	176	152
	3	84.4	219	279	259
Total		2.158	2.591	159	120
FRANCE	1	7.302	6.714	145	92
	2	3.249	4.853	296	149
	3	524	1.243	280	237
Total		11.075	12.810	175	116
LUXEMBOURG	1	43.0	55.3	132	129
	2	12.0	18.3	135	153
	3	0.6	...	600	...
Total		55.6	...	133	...
NETHERLANDS	1	1.860	2.429	119	131
	2	1.100	1.704	196	155
	3	124	195	249	157
Total		3.084	4.328	142	140
DENMARK (a)	1	573	980	131	115
	2	276	85.4	252	164
	3	52.0	...	...	...
Total		901	1.065	134	118
FINLAND	1	544	431	111	79
	2	347	375	282	108
	3	40.9	60.1	341	147
Total		932	866	149	93
IRELAND	1	495	594	107	120
	2	218	303	146	139
	3	17.1	37.8	190	221
Total		730	935	118	128
NORWAY	1	412	411	129	100
	2	248	332	276	134
	3 (a)	28.9	72.3	206	250
Total		689	815	163	118
UNITED KINGDOM	1	5.356	6.471	111	121
	2	3.450	5.757	160	167
	3	432	816	240	189
Total		9.238	13.044	129	141
SWITZERLAND	1	878	1.382	135	157
	2	282	375	175	133
	3	77.6	143	370	184
Total		1.238	1.900	149	153
SPAIN	1	3.624	3.833	130	106
	2	1.108	2.281	295	206
	3	156	360	202	231
Total		4.884	6.471	112	112

	Total	689	815	163	118
UNITED KINGDOM	1	5.356	6.471	111	121
	2	3.450	5.757	160	167
	3	4.332	816	240	128-210
	Total	9.238	13.044	129	139-249
SWEDEN	1	878	1.382	135	157
	2	282	375	175	133
	3	77	143	370	133-188
	Total	1.238	1.900	149	184
SPAIN	1	3.624	3.833	130	106
	2	1.108	2.281	295	102-109
	3	156	360	202	172-241
	Total	4.888	6.474	151	231
GREECE	1	1.004	942	105	94
	2	1.456	748	211	85-103
	3	66,0	333	413	164
	Total	1.526	2.023	129	505
ITALY	1	5.856	6.537	105	112
	2	3.060	6.206	275	90-133
	3	405	961	168	203
	Total	3.321	13.704	135	237
PORTUGAL	1	904	1.093	140	121
	2	316	653	352	111-130
	3	36,0	42,5	232	180-216
	Total	1.256	1.789	167	118
TURKEY	1	3.924	7.690	243	196
	2	730	2.129	510	173-219
	3	98,7	163	411	201-295
	Total	4.753	9.982	266	165
YUGOSLAVIA	1	2.984	4.074	161	137
	2	614	1.231	223	128-145
	3	185	756	336	292
	Total	3.783	6.061	173	118
CANADA	1	3.922	4.238	183	108
	2	1.205	2.303	315	191
	3	326	1.312	393	176-227
	Total	5.453	7.853	201	409
UNITED STATES	1	36.852	44.849	160	122
	2	13.000	19.608	199	133-169
	3	5.570	11.992	242	151
	Total	55.422	76.449	174	215
JAPAN	1	10.913	9.825	96	90
	2	11.040	9.084	152	82
	3	1.085	1.784	271	164
	Total	23.038	20.693	121	57-128

Source : Annex III

Notes : (a) The method used to calculate these figures is different from that used for the other countries.

Total: enrolments for each country do not include "other types of education".

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- (e) total enrolments should rise more quickly between 1965 and 1980 than between 1950 and 1965 in the following seven countries: Germany, Austria, Ireland, the United Kingdom, Sweden, Greece and Italy;
- (b) primary school enrolments should also rise more quickly in the same countries (except Greece) and in the Netherlands. They should fall in absolute value between 1965 and 1980 in five countries: Belgium, France, Finland, Greece and Japan;
- (c) in four countries only (Germany, Austria, Luxembourg and the United Kingdom), secondary school enrolments should rise at a higher rate;
- (d) the same should apply to higher education enrolments in seven countries: Germany, Austria, Canada, Spain, Greece, Italy and Yugoslavia;
- (e) lastly, the increase in higher education should remain greater than that of secondary school enrolments, except in Portugal and Turkey; it should not differ a great deal in the Netherlands.

For some countries, the increases calculated are very high, especially in higher education: 505 in Greece (i.e. 11.4 per cent per annum) and 409 in Yugoslavia (i.e. 9.9 per cent per annum). However, the calculation is very uncertain for these two countries.

61. Lastly, Table XXI gives the enrolment ratios for the 5-19 and 5-24 age-groups. Some ratios are above 100, which is not strictly impossible if it is accepted that quite a large number of children may be sent to school before the age of five (which is incidentally the case in Belgium, where the ratio should be 110 for the 5-19 age-group). It is possible to conclude from these indices that the extension of compulsory school attendance until the end of secondary education is the natural result of the extrapolation of the trends for the majority of Member countries.

In some cases, the ratio diminishes between 1965 and 1980. This does not necessarily mean a fall in enrolments, as we have shown in the last Chapter. In Japan, in particular, the drop in the ratio is largely attributable to considerable changes in the population structure.

TABLE XXIX - Increase in enrolments by level of education, between 1965 and 1980
(thousands)

	1st level	2nd level	3rd level	Total
GERMANY	595	1.773	650	3.018
AUSTRIA	300	233	74	607
BELGIUM	- 34	332	135	433
FRANCE	- 588	1.604	719	1.735
LUXEMBOURG	12	6	..	..
NETHERLANDS	569	604	71	1.244
DENMARK	- 113	..	33	164
FINLAND	99	28	19	- 66
IRELAND	99	85	21	205
NORWAY	- 1	84	43	126
UNITED KINGDOM	1.115	2.307	384	3.806
SWEDEN	504	93	65	662
SPAIN	209	1.173	204	1.586
GREECE	- 62	292	267	497
ITALY	681	3.146	556	4.383
PORTUGAL	189	337	7	533
TURKEY	3.766	1.399	64	5.229
YUGOSLAVIA	1.090	617	571	2.278
CANADA	316	1.098	986	2.400
UNITED STATES	7.997	6.608	6.422	21.027
JAPAN	-1.088	-1.956	699	-2.345

Source : Table XXVIII.

TABLE XXX - Enrolment ratios in 1965 and 1980 for the 5-19 and 20-24 age-groups

	Ratio Primary and secondary		Ratio Total enrolments	
	1965	1980	1965	1980
GERMANY	77	83	59	69
AUSTRIA	75	88	58	73
BELGIUM	95	110	79	88
FRANCE	87	92	73	77
LUXEMBOURG	78	82	60	..
NETHERLANDS	86	101	71	83
DENMARK	74	78	59	66
FINLAND	66	70	55	56
IRELAND	92	92	78	76
NORWAY	71	75	58	63
UNITED KINGDOM	72	82	58	69
SWEDEN	69	94	54	79
SPAIN	57	70	46	56
GREECE	67	79	55	71
ITALY	71	93	58	78
PORTUGAL	49	61	40	49
TURKEY	41	61	35	49
YUGOSLAVIA	66	92	55	79
CANADA	85	96	74	86
UNITED STATES	88	94	79	86
JAPAN	79	72	62	61

Source : Annex III.

CONCLUSIONS

62. We should like in conclusion to refer to a few essential points which we feel result from this work.

63. In the first place, it is certain that the pertinence and depth of the preceding analyses are limited by the quality of the statistics available and also by the absence of certain essential figures.

64. There can be no doubt that the average quality of the statistical material is rather poor. Proof of this may be obtained simply by trying to find the enrolments for a particular level of study, for a particular country, in a particular year: it will very often be found that the existing sources, including the most official ones, give figures that are sometimes very different although the divergence cannot always be explained. Even though matters have considerably improved in this respect over the last few years, much still remains to be done in order to make the national data comparable.

65. The inadequacy of the available statistics is particularly clear for forms of education which are more or less marginal to the traditional system, such as part-time and adult education. The statistics haphazardly included enrolments for all ages and all levels counted very differently from one country to another and which could not finally be used, so that the enrolment effort made by certain countries (1) was certainly underestimated.

66. Besides being inadequate in quality, the statistics are also inadequate in quantity, especially as regards the flow within the system (new entries, repeaters, departures with or without a diploma or degree). In particular, the absence of an age distribution of enrolments whereby enrolment rates could be calculated is as we have seen extremely regrettable; one of the most urgent tasks of responsible national services is now no doubt to collect such statistics.

67. Notwithstanding these limitations, certain conclusions are still sufficiently justified and we shall mention some of them.

68. The sudden increase in births after the war does not seem to have permanently held up the advance in enrolments. Without going into details for each Member country, we can at least mention the case of France, where the "demographic explosion" was the greatest of all the O.E.C.D. countries. Whereas the number of births was 626,000 in 1945 (maximum figure since 1937), it rose to 844,000 the following year (i.e. 25 per cent up) and stayed above 800,000 up to 1965. In spite of this, the enrolment rate

(1) In Denmark, for example, total enrolments at 1st, 2nd and 3rd levels were 901,000 in 1965. In the same year, adult education enrolments were 470,000.

at 14 years of age when compulsory school attendance ended at that time fell only slightly in 1960 and the rate at 15 years of age fell even more slightly in 1961. On the other hand, the enrolment rates at 16 and 17 years of age were constantly rising, as the following table shows (as a percentage of the age-group).

	14	15	16	17
1959	69.3	53.9	45.0	29.1
1960	68.2	53.4	45.3	30.4
1961	68.8	53.3	46.4	32.4
1962	71.3	56.6	47.6	33.7
1963	71.8	56.8	49.0	34.9

69. In all countries, an increasingly large fraction of each age-group stays in the educational system longer and longer to pursue their studies further and further. The two phenomena are certainly not inextricably linked since the period of study may be extended by a rise in the number of repeaters, but there is no doubt about the trends.(1) This rise in the average level of education is reflected in what we have observed in the majority of countries: the second level has increased more quickly than the first level and the third level more quickly than the second. Four Mediterranean countries out of six (2) nonetheless form an exception: the increase in secondary education was much greater than in higher education and secondary school enrolments grew even at a faster rate than in most other countries.

70. The rise in enrolments between 1965 and 1980 will probably be less than that observed between 1950 and 1965, the main reason for this conjecture being that for many countries complete enrolment of the 5-19 age-group, which is already far advanced, will combine with a smaller demographic increase in this age-group than occurred in the past. It will be recalled, however, that this lower increase does not necessarily mean that the efforts made so far should be curtailed, since as enrolment gradually reaches its maximum it concerns pupils whose problems will perhaps be more difficult to solve than those of other pupils who are already inside the educational system.

-
- (1) Although inequalities between social classes may still be considerable, the reader is referred in this connection to Background Study No. 4 of the Conference on Policies for Educational Growth "Group Disparities in Educational Participation".
 - (2) The two others are Yugoslavia and perhaps Greece (the restriction made in regard to this latter country is due to the inadequacy of the basic statistics).

71. All of this obviously raises the problem of available resources up to 1980. Two Conference Studies deal more closely with teacher requirements and financial resources. They show that even though the pupil/teacher ratio improves, teacher requirements should generally grow in primary and secondary education at a slower rate than during the period 1950-1965. On the other hand the rate should be greater in higher education for a few countries (the Mediterranean countries in particular).

72. At the same time, the extrapolation of trends as regards financial resources does not on the whole reveal any evident limits, although it is possible that the rise in educational expenditure is slowing down in roughly half of the countries.

73. To sum up, the less developed countries will still have to face problems as a result of the quantitative expansion of their educational systems. On the other hand, it is probable that the more developed countries' priority problems during the period 1965-1980 will be qualitative rather than quantitative.

ANNEX I

Statistical series

The tables that follow present three categories of statistical series:

- demographic statistics;
- enrolment statistics;
- enrolment ratios.

Member countries have been grouped in the following order:

- Western Europe: Germany, Austria, Belgium, France, Luxembourg, Netherlands, Switzerland;
- Northern Europe: Denmark, Finland, Ireland, Iceland, Norway, United Kingdom, Sweden;
- Mediterranean countries: Spain, Greece, Italy, Portugal, Turkey, Yugoslavia;
- North America: Canada, United States;
- Japan.

The figures in brackets quoted in any of these tables are Secretariat estimates.

Totals may differ slightly from the sum of their components owing to rounding.

1. Demographic statistics

Table I shows the breakdown by five-year age groups of the population aged from 5 to 24 years between 1950 and 1965.

The figures in this table have been taken from successive editions of the United Nations Demographic Yearbook. The 1960 edition, in particular, quotes year by year all the series for the period 1940-1960.

Estimates in place of missing data were made as follows:

In cases where one or two years were missing from a series, population numbers were estimated from the survival rates deriving from the statistics for the nearest available years.

Where several successive years were missing yet full birth statistics were available, the first step taken was to calculate the ratio between the number of persons in the different age groups and that of corresponding births, for the years where this was feasible. Generally speaking this ratio followed a fairly pronounced trend which was used to complete the series. This was the method used in the case of Portugal, Ireland, Iceland, Italy, Luxembourg and Spain. However, the same procedure could not be followed in the case of Turkey, where no birth statistics are available, and Yugoslavia, where there are no birth statistics for the period 1940-1946. In both instances, the proportion of each age group was simply interpolated into the total population.

By and large, the estimates are for mid-year. In the few countries for which this was not so (Ireland for April, Spain for December, Turkey and Japan for October), no adjustment was made.

The sources for Tables II (Total Population) and III (Births) were the League of Nations and United Nations Yearbooks.

2. Enrolment statistics

(a) Enrolments were divided into three levels of studies:

1st level: pre-primary and primary education (Table IV);

2nd level: secondary education - general, technical and vocational, and teacher training (Table V);

3rd level: higher education, university and non-university (Tables VI and VII).

Table VIII gives the combined figures for the three levels and includes a heading entitled "Miscellanecus" which essentially covers special education (1).

(b) The figures given in these tables represent aggregate enrolments in public and private educational establishments. They do not, insofar as it was possible to make the distinction, include part-time enrolments other than in higher education. An exception was made, however, in the case of the Austrian and German Berufsschulen.

The year specified is that of the beginning of the academic year (e.g. 1960 for 1960-1961).

(1) In the case of Great Britain this heading also covers a proportion of independent schools whose enrolments cannot be divided into 1st and 2nd levels.

- (c) The absence of a specific heading does not necessarily mean that a given type of education does not exist. This is the case, in particular, with teacher training and special education, which it was not always possible to isolate.
- (d) An endeavour was made to include terminal primary education in 2nd level education, wherever this was justified (1). On the other hand, where secondary education was concerned, it was not possible to distinguish for a sufficient number of countries between short- and long-course education, nor even, as the Secretariat's manual suggested, between studies that normally lead to higher education (type a) and those that do not (type b). This would imply that it is possible to convert national classifications into a uniform international classification, but the Secretariat's work on the "conversion key" is not yet sufficiently advanced.
- For the same reasons, the distinction between general education and technical education (Table V) is probably not uniform in all countries (certain forms of commercial education, in particular, can be classified under either heading).
- (e) The statistics for higher education are, in this respect, much more uniform. They represent the findings of a special survey made by the Secretariat (2).
- (f) Additional information on organisation of studies in primary and secondary education may be found in Annex II and in Development of Secondary Education, Trends and Implications, O.E.C.D. 1969.
- (g) The statistical series were compiled from national publications supplemented, where necessary, by earlier Secretariat publications (Mediterranean Regional Project reports, reports on the programme for Educational Investment and Planning) or UNESCO publications (Statistical Yearbook, World Survey of Education). All the statistics on higher education were taken from the survey mentioned under (e). (3)

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- (1) This was not always possible. In Yugoslavia, for instance, 1st level enrolments include those in the upper primary cycle, which it would have been more accurate to classify under the 2nd level.
- (2) Statistical survey on the quantitative development of higher education. A separate paper was prepared for each Member country which may be referred to for further details.
- (3) There may be a few slight differences between the figures quoted here and those of the survey, in the case of Finland, the United Kingdom, Luxembourg and Germany. This is due to subsequent revision of the documents concerned.

The main national publications used were the following (in many cases they are annual, and the most recent editions were therefore consulted);

- Germany : - Statistisches Jahrbuch für die Bundesrepublik Deutschland.
- Austria : - Statistisches Jahrbuch für die Republik Österreich.
Osterreichische Schulstatistik
Zahlenmässige Darstellung des Schulwesens in Österreich.
- Belgium : - Annuaire Statistique de l'Enseignement.
Annuaire Statistique de la Belgique
- France : - Informations Statistiques
Tableaux de l'Education Nationale
Annuaire Statistique de la France, résumé rétrospectif, 1966.
- Luxembourg : - Annuaire Statistique.
- Netherlands : - De Ontwikkeling van het onderwijs in Nederland, 1966.
Jaarcijfers voor Nederland.
- Switzerland : - Annuaire Statistique de la Suisse.
- Denmark : - Statistik Arbog.
Børneskolen.
- Finland : - Statistical Yearbook of Finland.
- Ireland : - Statistical Abstract of Ireland.
Education Statistics
- Norway : - Statistik Arbok for Norge
Undervisningsstatistik.
- United Kingdom Education in the United Kingdom
Statistics of Education
Annual Abstract of Statistics.
- Sweden : - Statistisk Arsbok.
- Spain : - Estadistica de la Enseñanza en España
Estadistica de la Enseñanza Primaria
Estadistica de la Enseñanza Media

- Annuario Estadistico de España
Datos y Cifras de la Enseñanza en España.
- Greece : - Statistical Yearbook of Greece
Statistiques de l'Enseignement.
- Italy : - Annuario Statistico Italiano
Annuario Statistico dell'Istruzione Italiana
Sviluppo dell'Istruzione, 1963.
- Portugal : - Estatistica da Educação
Annuario Estatistico.
- Turkey : - Annuaire Statistique
Isktistik Yilliga
Communication du Département en Planification Sociale.
- Yugoslavia : - Osnovne I Srednje Škole
Škole I i II Stepena
Visoke Škole.
- Canada : - Canada Yearbook
Enrolment in Schools and Universities 1951-52 to 1975-76, by W.M. Illing and Z.E. Zsigmond Survey of Elementary and Secondary Education.
- United States: - Statistical Abstract of the United States Digest of Educational Statistics.
- Japan : - Japan Statistical Yearbook
Education in Japan.

3. Enrolment ratios

These ratios have been defined as follows:

1st level (Table IX)

$$1000 \frac{\text{1st level enrolments}}{\text{Population aged 5 to 14 years}}$$

2nd level (Table X)

$$1000 \frac{\text{2nd level enrolments}}{\text{Population aged 10 to 19 years}}$$

1st and 2nd levels (Table VI)

1000 1st and 2nd level enrolments

Population aged 5 to 19 years

3rd level (Table X)

1000 3rd level enrolments

Population aged 20 to 24 years

Total enrolments (Table XI)

1000 Total enrolments

Population aged 5 to 24 years

TABLE I - Five-year age-groups of the population aged 5 to 24 (1950-1965)

(thousands)

(1)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY 5-9	3718	3465	3325	3367	3383	3518	3643	3807	3673	3902	3919	3913	4039	4096	4218	(4356)
10-14	4461	4534	4509	4469	4289	3956	3557	3450	3429	3444	3580	3797	3887	3899	3911	(3928)
15-19	3581	3700	3890	4225	4466	4655	4709	4708	4605	4408	4066	3682	3533	3523	3532	(3668)
20-24	3686	3693	3665	3675	3671	3782	3896	3969	4275	4555	4781	4758	4778	4716	4551	(4208)
Total	15446	15392	15389	15736	15809	15911	15805	15934	16182	16309	16346	16150	16237	16234	16212	(15160)
AUSTRIA 5-9	532	513	502	504	502	509	514	505	490	482	(469)	487	(507)	528	548	568
10-14	527	543	582	604	600	559	511	495	498	495	(505)	513	(502)	485	479	480
15-19	446	440	430	426	450	498	541	576	595	590	(557)	517	(498)	499	495	499
20-24	488	487	481	473	465	450	434	423	418	440	(480)	516	(561)	590	589	550
Total	1993	1983	1995	2007	2015	2016	2000	1999	2001	2007	(2011)	2033	(2068)	2102	2111	2097
BELGIUM 5-9	542	576	621	653	673	691	696	695	700	(704)	710	726	(733)	739	752	(761)
10-14	570	555	538	530	531	542	577	622	655	(675)	694	700	(699)	703	708	(714)
15-19	623	604	589	582	579	571	556	540	531	(533)	545	605	(639)	662	686	(705)
20-24	656	652	651	645	636	622	605	591	583	(580)	572	551	(543)	542	549	(556)
Total	2391	2387	2399	2410	2419	2426	2434	2448	2469	(2492)	2521	2582	(2614)	2646	2695	(2736)
FRANCE 5-9	2427	2630	2896	3136	(3357)	3661	3670	3642	4020	3985	3539	3546	4049	(3866)	3695	3705
10-14	2747	2645	2608	2621	(2661)	2767	3077	3367	3501	3763	4118	4111	4189	(4390)	4140	4112
15-19	3111	3029	2941	2887	(2875)	2800	2709	2682	2701	2724	2816	3131	3327	(3617)	4040	4292
20-24	3295	3278	3277	3238	(3197)	3101	3062	3022	3027	2998	2904	2816	2783	(2843)	2907	3013
Total	11580	11582	11722	11882	(12090)	12329	12518	12713	13249	13470	13377	13604	14348	(14716)	14782	15122
LUXEMBURG 5-9	(19,4)	(19,8)	(19,5)	(19,3)	(19,3)	(19,6)	(19,7)	19,7	20,2	20,8	22,5	(23,0)	(23,5)	24,2	(24,6)	(25,0)
10-14	(17,5)	(17,6)	(18,0)	(18,3)	(18,5)	(18,8)	(18,9)	19,1	19,0	20,3	(20,3)	(20,9)	21,6	(22,8)	(23,6)	
15-19	(20,1)	(19,4)	(19,2)	(19,2)	(19,4)	(19,3)	(19,7)	19,9	20,1	20,0	19,8	(21,0)	(21,0)	20,9	21,2	21,8
20-24	(25,7)	(26,6)	(26,4)	(25,8)	(24,8)	(23,5)	(22,4)	22,1	22,0	21,7	(21,8)	(22,2)	22,5	(22,5)	(22,5)	
Total	(82,7)	(83,4)	(83,1)	(82,6)	(82,0)	(81,2)	(80,7)	80,8	81,3	82,0	84,3	(86,1)	(87,6)	89,2	(91,1)	(93,0)

TABLE I (contd.) - Five-year age-groups of the population aged 5 to 24 (1950-1965)

	(2)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
NETHERLANDS	5-9	932	989	1073	1128	1160	1186	1177	1137	1117	1110	1106	1111	1118	1126	1139	(1150)
	10-14	825	837	849	869	895	918	974	1058	1118	1155	1183	1177	1140	1118	1108	(1106)
	15-19	811	806	799	798	806	818	830	843	865	893	914	969	1057	1118	1154	(1182)
	20-24	800	805	804	801	794	790	785	783	785	795	807	819	835	858	887	(908)
	Total	3368	3437	3525	3596	3655	3712	3766	3821	3885	3953	4010	4076	4150	4220	4288	(4346)
SWITZERLAND	5-9	392	398	409	417	419	417	413	408	405	403	403	407	428	(428)	430	441
	10-14	307	306	317	340	364	385	405	415	421	423	423	419	417	(416)	415	421
	15-19	328	320	318	321	323	322	328	341	359	375	407	435	482	(480)	474	476
	20-24	350	341	344	350	353	350	348	362	361	357	368	417	484	(495)	504	528
	Total	1377	1365	1388	1428	1459	1474	1494	1526	1546	1558	1601	1678	1811	(1819)	1823	1866
DENMARK	5-9	394	409	428	435	431	419	403	387	377	373	371	371	370	368	(367)	
	10-14	315	319	328	342	361	384	409	426	432	428	417	401	387	378	374	(372)
	15-19	292	293	297	302	306	311	316	324	339	358	381	405	422	429	426	(415)
	20-24	296	291	287	288	287	287	297	297	303	309	319	334	353	(353)	(376)	
	Total	1297	1312	1340	1367	1385	1401	1415	1424	1438	1456	1472	1486	1499	1511	1521	(1520)
FINLAND	5-9	577	585	415	454	482	495	490	478	465	451	439	(436)	433	424	(419)	410
	10-14	329	329	344	341	343	360	384	414	451	478	492	(488)	476	464	(452)	442
	15-19	312	310	310	316	325	329	337	343	340	342	372	(389)	412	449	(476)	489
	20-24	327	325	322	317	311	307	305	306	312	322	312	(323)	332	331	(329)	353
	Total	1345	1359	1391	1428	1461	1491	1516	1541	1568	1593	1615	(1636)	1653	1668	(1676)	1694
IRELAND	5-9	(268)	281	(287)	(293)	(297)	(297)	(296)	(294)	(291)	(291)	(289)	(288)	(284)	(283)	(282)	(281)
	10-14	(266)	261	(263)	(266)	(269)	(273)	(277)	(284)	(288)	(290)	(291)	(289)	(289)	(289)	(289)	(291)
	15-19	(241)	241	(241)	(239)	(236)	(233)	(232)	(233)	(233)	(232)	(233)	(234)	(227)	(221)	(214)	(203)
	20-24	(208)	202	(195)	(190)	(187)	(184)	(179)	(176)	(173)	(167)	(162)	(158)	(159)	(159)	(161)	(163)
	Total	(983)	985	(986)	(988)	(989)	(987)	(984)	(987)	(981)	(980)	(975)	(969)	(959)	(952)	(946)	(938)

TABLE I (contd.) - Five-year age-groups of the population aged 5 to 24 (1950-1965) (thousands)

(3)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	
ICELAND	14,6	(15,4)	(16,1)	(16,7)	(17,3)	18,1	18,4	19,0	19,4	(19,9)	20,4	(21,1)	21,5	22,0	(22,6)	22,8	
5-9	11,5	(11,5)	(12,1)	(12,8)	(13,6)	14,5	15,0	15,8	16,5	(17,2)	17,8	(18,5)	19,0	19,4	(19,9)	20,3	
10-14	12,2	(11,9)	(11,8)	(11,6)	(11,5)	11,5	11,5	11,7	12,4	(13,3)	14,2	(15,0)	15,8	16,5	(17,2)	17,8	
15-19	12,3	(12,4)	(12,4)	(12,4)	(12,4)	12,1	11,9	11,7	11,6	(11,3)	11,7	(11,3)	11,9	12,5	(13,3)	14,1	
20-24	50,6	(51,2)	(52,4)	(53,5)	(54,8)	56,2	56,8	58,2	59,9	(61,7)	64,1	(65,9)	68,2	70,4	(73,0)	75,0	
NORWAY	5-9	267	281	301	313	319	317	313	305	303	301	302	305	308	(309)	308	
10-14	214	214	220	230	243	257	277	297	311	316	317	312	302	(302)	302	(303)	
15-19	204	203	200	204	210	215	220	229	241	257	280	312	(315)	317	(318)		
20-24	229	227	222	217	211	207	202	200	204	209	212	228	(229)	241	(257)		
Total	914	925	943	960	977	991	1007	1022	1043	1062	1085	1109	1150	(1155)	1168	(1185)	
UNITED-KINGDOM	5-9	3611	3688	4024	4204	4258	4284	4280	4032	3900	3835	(3802)	3805	3873	3833	(3962)	4114
10-14	3348	3311	3330	3366	3465	3565	3712	4023	4171	4224	(4255)	4245	4013	4268	(4018)	3798	
15-19	3309	3174	3250	3261	3299	3310	3284	3289	3350	3453	(3568)	3715	4023	3749	(4029)	4282	
20-24	3560	3392	3394	3375	3322	3292	3261	3252	3287	3343	(3396)	3386	3360	3330	(3470)	3626	
Total	13828	13565	13998	14206	14344	14451	14537	14596	14708	14855	(15021)	15151	15269	15180	(15479)	15820	
SWEDEN	5-9	590	607	630	638	632	618	599	580	564	(546)	533	533	528	(527)	525	
10-14	452	457	475	502	535	571	606	630	638	(628)	610	600	580	564	(550)	539	
15-19	416	417	418	424	435	448	461	479	507	(549)	594	610	633	641	(638)	626	
20-24	459	457	452	444	435	431	430	433	439	(452)	466	473	492	519	(555)	594	
Total	1917	1938	1975	2008	2037	2068	2096	2122	2148	(2175)	2203	2216	2236	2252	(2270)	2284	
SPAIN	5-9	2435	(2520)	(2590)	(2642)	(2635)	(2643)	(2671)	(2647)	(2648)	2700	(2760)	(2834)	(2919)	(3016)	(3103)	
10-14	2326	(2246)	(2224)	(2321)	(2487)	(2491)	(2564)	(2623)	(2666)	(2679)	2642	(2637)	(2654)	(2618)	(2607)	(2650)	
15-19	2688	(2669)	(2588)	(2459)	(2283)	(2201)	(2174)	(2262)	(2418)	(2412)	(2479)	(2530)	(2563)	(2567)	(2522)		
20-24	2672	(2645)	(2677)	(2682)	(2672)	(2653)	(2627)	(2541)	(2409)	(2233)	(2238)	(2140)	(2109)	(2189)	(2334)	(2327)	
Total	10121	10080	(10079)	(10104)	(10106)	(10063)	(10055)	(10009)	(9984)	(9976)	9992	(10016)	(10127)	(10289)	(10524)	(10622)	

TABLE I (contd.) - Five-year age-groups of the population aged 5 to 24. (1950-1965) (thousands)

(4)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	
GREECE	(633)	650	703	729	732	724	716	703	695	701	706	712	714	728	731	734	
5-9																	
10-14	(744)	766	711	673	648	642	659	695	721	723	717	736	714	700	704	715	
15-19	(792)	790	781	779	779	768	742	701	664	639	633	616	681	726	735	727	
20-24	(720)	732	751	763	763	766	764	761	757	752	741	725	663	623	593	587	
Total	(2889)	2938	2946	2944	2922	2900	2881	2860	2837	2815	2797	2789	2772	2777	2763	2761	
ITALY	(3755)	3871	(3974)	(4113)	(4251)	(4365)	(4242)	(4138)	(4000)	(3963)	4029	4049	4040	(4092)	4117	(4212)	
5-9																	
10-14	(4204)	4211	(4179)	(4069)	(3898)	(3729)	(3834)	(3928)	(4066)	(4193)	4301	4171	4139	(4022)	4028	(4061)	
15-19	(4002)	4004	(4031)	(4084)	(4133)	(4194)	(4194)	(4149)	(4040)	(3861)	3811	3780	3862	(4000)	4114	(4218)	
20-24	(4071)	4031	(4019)	(3987)	(3977)	(3927)	(3902)	(3927)	(3985)	(4048)	4136	4065	4044	(3962)	3981	(3655)	
Total	(16032)	16117	(16203)	(16253)	(16215)	(16559)	(16215)	(16142)	(16091)	(16065)	16277	16065	16085	(16076)	16240	(16146)	
PORTUGAL	5-9	798	827	807	812	824	830	834	873	903	883	873	(866)	(863)	879	889	
10-14	800	770	791	781	780	779	784	785	832	804	838	(850)	(870)	(865)	862	871	
15-19	811	818	806	798	791	784	(784)	776	739	763	747	(747)	(740)	(740)	731	727	
20-24	762	755	774	780	787	786	(791)	787	758	755	750	(726)	(709)	(699)	690	687	
Total	3171	3170	3178	3171	3182	3179	3193	3221	3232	3205	3208	(3189)	(3182)	(3173)	3162	3174	
TURKEY	5-9	2574	(2709)	(2833)	(2962)	(3095)	(3234)	(3376)	(3524)	(3677)	(3836)	3997	(4122)	(4242)	(4366)	(4493)	4628
10-14	2355	(2373)	(2377)	(2380)	(2381)	(2383)	(2529)	(2682)	(2843)	(3010)	3174	(3306)	(3436)	(3570)	(3709)	3849	
15-19	2388	(2393)	(2382)	(2369)	(2355)	(2333)	(2331)	(2328)	(2323)	(2315)	2305	(2420)	(2536)	(2656)	(2782)	2919	
20-24	1963	(2038)	(2104)	(2172)	(2243)	(2318)	(2319)	(2318)	(2315)	(2310)	2302	(2302)	(2320)	(2333)	(2356)	2366	
Total	9280	(9513)	(9696)	(9883)	(10072)	(10268)	(10555)	(10852)	(11158)	(11471)	11778	(12150)	(12534)	(12925)	(13340)	13762	
YUGOSLAVIA	5-9	1498	1441	1432	1507	1680	1749	1852	1913	1970	(2127)	(2026)	2001	(1945)	(1895)	(1884)	(1863)
10-14	1754	1732	1711	1605	1627	1506	1426	1447	1508	(1677)	(1739)	1833	(1886)	(1935)	(2080)	(1977)	
15-19	1762	1786	1805	1757	1757	1706	1654	1617	1569	(1585)	(1461)	1378	(1392)	(1445)	(1600)	(1652)	
20-24	1584	1643	1678	1723	1724	1786	1761	1750	1717	(1704)	(1643)	1582	(1535)	(1478)	(1482)	(1356)	
Total	6598	6602	6626	6592	6788	6747	6693	6727	6764	(7093)	(6869)	6794	(6758)	(6753)	(7046)	(6848)	

TABLE I (contd.) - Five-year age-groups of the population aged 5 to 24 (1950-1965)

(thousands)

(5)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
CANADA																
5-9	1314	1398	1483	1558	1645	1731	1807	1859	1917	1966	2017	2080	(2112)	2146	2181	2214
10-14	1123	1131	1189	1240	1302	1368	1435	1518	1596	1666	1734	1856	(1907)	1965	2004	2040
15-19	1077	1058	1076	1092	1114	1138	1162	1214	1266	1317	1376	1433	(1520)	1600	1693	1779
20-24	1108	1089	1100	1107	1115	1122	1129	1164	1186	1198	1218	1184	(1220)	1255	1311	1377
Total	4622	4676	4848	4997	5176	5359	5533	5755	5965	6147	6345	6553	(6759)	6966	7189	7410
UNITED- STATES																
5-9	13201	13670	14936	15560	16358	17151	18060	17991	18285	18701	19257	19172	(19653)	20012	20277	20519
10-14	11119	11380	11776	12436	12893	13343	13721	14985	15613	16431	17297	17859	(17757)	18000	18294	18956
15-19	10616	10621	10642	10810	11043	11191	11430	11826	12487	12956	13459	13739	(14955)	15536	16287	17052
20-24	11482	11502	11533	11098	10880	10775	10725	10746	10918	11162	11348	11459	(11897)	12600	13144	13667
Total	46418	47173	48687	49904	51174	52460	53936	55548	57303	59250	61361	62229	(64262)	66148	68102	70194
JAPAN																
5-9	9522	9092	9421	9907	10399	11043	11576	11160	10495	9702	9205	(8754)	8352	8051	7934	(7773)
10-14	8700	8865	9056	9247	9670	9508	9058	9389	9912	10398	11018	(11518)	11066	10479	9703	(9196)
15-19	8568	8680	8758	8746	8637	8626	8792	9011	9239	9634	9309	(8895)	9245	9843	10360	(10963)
20-24	7726	7874	8040	8225	8356	8403	8531	8609	8598	8497	8318	(8502)	8735	8967	9397	(9123)
Total	34516	34511	35275	36125	37062	37580	37957	38169	38244	38231	37850	(37669)	37398	37340	37394	(37055)

TABLE II - Total population in the middle of the year (1950-1965)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
WESTERN EUROPE																
Germany	49986	50531	50844	51386	51875	52363	52995	53649	54283	54882	55423	56227	56947	57607	58290	59041
Austria	6935	6934	6928	6933	6940	6947	6952	6966	6987	7014	7048	7087	7130	7172	7215	7255
Belgium	8639	8678	8730	8778	8819	8868	8924	8989	9053	9104	9153	9184	9221	9290	9378	9464
France	41736	42056	42360	42652	43057	43428	43843	44311	44789	45240	45684	46163	46998	47854	48411	48922
Luxembourg	296	297	299	301	303	305	307	308	310	312	314	317	321	324	328	331
Netherlands	10114	10264	10382	10493	10615	10751	10889	11021	11186	11346	11480	11637	11797	11967	12127	12292
Switzerland	4694	4749	4815	4878	4929	4980	5045	5126	5199	5259	5362	5496	5660	5770	5874	5945
NORTHERN EUROPE																
Denmark	4271	4304	4334	4369	4406	4439	4466	4488	4515	4547	4581	4610	4647	4684	4720	4758
Finland	4009	4047	4091	4139	4187	4235	4282	4324	4360	4395	4430	4467	4505	4543	4580	4612
Ireland	2969	2961	2953	2949	2941	2921	2898	2885	2853	2846	2834	2818	2824	2841	2849	2855
Iceland	143	145	148	151	154	158	161	165	168	172	176	179	182	186	189	192
Norway	3265	3296	3338	3361	3394	3427	3460	3492	3523	3553	3581	3610	3639	3667	3694	3723
United-Kingdom	50616	50562	50723	50862	51046	51199	51406	51632	51842	52128	52508	52964	53481	53817	54217	54595
Sweden	7014	7070	7125	7171	7213	7262	7315	7364	7409	7446	7480	7520	7562	7604	7661	7734
MEDITERRANEAN COUNTRIES																
Spain	27868	28095	28332	28571	28812	29056	29301	29548	29798	30049	30303	30559	30817	31077	31339	31604
Greece	7554	7646	7733	7817	7893	7966	8031	8096	8173	8258	8327	8398	8448	8480	8510	8578
Italy	46769	47092	47345	47604	47899	48200	48469	48743	49041	49356	49642	49903	50190	50641	51090	51575
Portugal	8405	8459	8496	8534	8570	8610	8647	8680	8725	8776	8826	8894	8971	9037	9106	9234
Turkey	20947	21634	22219	22818	23433	24065	24771	25498	26247	27017	27755	28602	29418	30256	31118	32005
Yugoslavia	16346	16588	16798	17048	17284	17519	17685	17859	18018	18214	18402	18607	18837	19065	19279	19511
NORTH AMERICA																
Canada)	13737	14050	14496	14886	15330	15736	16123	16677	17120	17522	17909	18269	18600	18925	19271	19604
United-States	152271	154878	157553	160184	163026	165931	168903	171984	174882	177830	180684	183756	186656	189417	192120	194572
JAPAN	82900	84200	85500	86700	88000	89200	89750	90200	90750	91500	92430	93210	94050	94930	95800	96906

TABLE III - Number of births per year between 1921 and 1965

STF(70)6
Annex I

(thousands)

	GER-MANY	AUSTRIA	BELGIUM	CANADA	DENMARK	SPAIN	UNITED STATES	FINLAND	FRANCE	GREECE	IRELAND	
1921	...	151	163	258	76,8	649	1714	82,2	612	118	61,0	
1922	...	151	154	253	73,9	656	1775	80,1	760	110	58,8	
1923	...	147	158	240	74,6	662	1737	82,0	761	114	61,7	
1924	...	142	153	245	73,8	654	1931	78,1	754	117	63,4	
1925	...	136	154	242	71,9	645	1679	78,3	770	156	62,1	
1926	...	127	150	233	70,7	665	1856	76,9	767	181	61,2	
1927	...	119	145	234	68,0	635	2138	75,6	744	177	60,1	
1928	...	117	147	237	68,5	666	2235	77,5	749	189	59,2	
1929	...	112	146	235	65,3	654	2170	76,0	730	182	58,3	
1930	...	112	151	243	66,3	661	2204	75,2	750	200	58,4	
1931	...	107	149	240	64,3	642	2115	71,9	734	199	57,1	
1932	...	102	146	236	64,7	675	2074	69,4	722	186	56,2	
1933	...	96,4	137	223	62,8	672	2081	65,0	679	190	57,4	
1934	...	91,6	134	221	65,1	642	2168	67,7	578	209	57,9	
1935	...	88,7	128	221	65,2	637	2155	69,9	641	193	58,3	
1936	...	88,3	128	220	66,4	617	2145	68,9	631	193	58,1	
1937	...	86,4	129	220	67,4	569	2203	72,3	618	184	56,5	
1938	...	93,8	134	229	68,5	509	2287	76,7	616	185	56,9	
1939	...	138	130	229	67,9	522	2266	78,2	587	179	56,1	
1940	...	146	112	244	70,1	631	2360	65,8	539	179	56,6	
1941	...	135	101	255	71,3	511	2513	89,6	496	135	56,8	
1942	...	116	109	272	79,5	531	2509	61,7	545	153	66,1	
1943	...	122	123	264	84,4	607	2935	76,1	586	122	64,4	
1944	...	127	127	264	90,6	602	2795	79,4	604	146	65,4	
1945	...	101	131	289	95,1	622	2735	85,8	626	183	66,9	
1946	733	111	153	344	96,1	582	3304	106	844	209	67,9	
1947	781	129	150	373	91,7	585	3717	108	870	206	69,0	
1948	806	123	150	360	84,9	639	3553	108	871	210	65,9	
1949	833	113	148	367	79,9	599	3577	104	873	139	64,2	
1950	813	108	146	372	79,6	562	3572	98,1	862	151	63,3	
1951	796	103	142	381	76,6	565	3770	93,1	827	159	62,9	
1952	799	103	146	404	76,9	590	3868	94,3	822	150	64,6	
1953	796	103	146	416	78,3	586	3925	90,9	605	144	62,6	
1954	816	104	149	436	76,4	575	4041	89,9	811	152	62,5	
1955	820	109	149	443	76,8	596	4071	89,7	806	154	61,6	
1956	855	116	150	451	76,7	605	4188	88,9	807	158	60,7	
1957	892	119	153	469	75,5	643	4280	87,0	816	156	61,2	
1958	904	120	155	470	74,7	650	4228	81,1	812	155	59,5	
1959	952	124	158	479	73,9	651	4262	87,3	829	160	60,2	
1960	969	126	155	479	76,1	660	4256	82,1	820	157	60,7	
1961	1013	132	158	476	76,4	652	4268	82,0	839	151	59,8	
1962	1019	133	155	470	77,8	656	4167	81,5	832	152	61,8	
1963	1054	135	159	466	82,4	668	4098	82,3	869	148	63,2	
1964	1065	134	161	453	83,4	695	4027	80,4	878	153	64,1	
1965	1044	130	155	419	85,8	674	3760	78,3	866	151	63,5	

TABLE III - Number of births per year between 1921 and 1965 (contd.)

												(thousands)
	ICELAND	ITALY	JAPAN	LUXEMB.	NORWAY	NETHER-LANDS	PORTUGAL	UNITED KINGDOM	SWEDEN	SWITZERLAND	YUGSL.	
1921	2,60	1118	1991	5,49	64,0	120	199	1002	128	80,8	...	
1922	2,55	1176	1969	5,09	62,5	152	206	925	117	76,5	...	
1923	2,61	1155	2043	5,47	61,3	186	209	900	113	75,6	...	
1924	2,53	1124	1999	5,37	58,0	182	211	865	110	73,5	443	
1925	2,55	1110	2086	5,62	54,0	179	210	842	105	72,6	457	
1926	2,68	1095	2104	5,64	54,2	177	217	825	102	72,1	459	
1927	2,64	1094	2051	5,66	50,2	175	203	778	98,0	69,5	451	
1928	2,54	1072	2138	6,11	49,9	179	211	783	97,9	69,6	438	
1929	2,64	1038	2077	6,21	48,4	177	201	762	92,9	69,0	453	
1930	2,81	1093	2085	6,38	47,8	182	205	769	94,2	69,9	439	
1931	2,80	1026	2103	5,99	46,0	177	204	750	91,1	62,2	470	
1932	2,70	991	2168	5,30	45,5	179	208	730	89,8	68,7	466	
1933	2,53	996	2106	4,90	42,1	171	204	692	85,0	67,5	452	
1934	2,60	993	2028	4,67	41,8	172	203	712	85,1	67,3	461	
1935	2,55	997	2174	4,52	41,5	170	204	711	85,9	66,4	442	
1936	2,56	962	2086	4,51	42,2	172	206	720	88,9	65,0	436	
1937	2,40	992	2165	4,51	43,8	170	198	724	90,4	62,5	424	
1938	2,37	1037	1912	4,49	45,3	199	199	736	95,9	63,8	411	
1939	2,36	1040	1886	4,51	46,6	161	199	727	97,4	63,8	404	
1940	2,48	1046	2100	5,96	47,9	185	188	702	95,6	64,1	...	
1941	2,63	938	2260	4,11	45,8	182	184	696	99,7	71,9	...	
1942	3,01	926	2216	4,52	53,2	190	188	772	114	78,9	...	
1943	3,17	882	2235	4,47	57,3	209	198	811	125	83,0	...	
1944	3,21	815	2150	4,26	62,2	220	201	878	135	85,6	...	
1945	3,43	816	1686	3,86	61,8	210	209	796	135	88,5	...	
1946	3,43	1040	1906	4,26	70,7	264	206	955	133	89,1	...	
1947	3,70	1015	2679	4,18	67,6	267	200	1025	129	87,7	417	
1948	3,82	1009	2682	4,16	65,6	248	221	905	127	87,8	447	
1949	3,88	940	2697	4,03	63,1	236	212	855	121	85,3	484	
1950	4,09	912	2338	4,12	62,4	230	205	818	115	84,8	494	
1951	4,00	864	2138	4,18	60,6	228	208	797	110	81,9	447	
1952	4,08	847	2005	4,54	62,5	232	211	795	110	83,5	449	
1953	4,25	842	1882	4,57	63,0	228	202	804	110	83,0	484	
1954	4,28	871	1770	4,71	62,7	228	198	795	105	83,7	494	
1955	4,51	869	1731	4,66	63,6	229	210	789	107	85,5	471	
1956	4,60	874	1665	4,83	64,2	231	203	652	108	87,9	460	
1957	4,73	879	1568	4,95	63,1	234	211	851	107	90,8	427	
1958	4,64	870	1653	4,96	63,0	237	212	870	106	91,4	432	
1959	4,84	901	1626	5,04	63,0	243	213	879	105	93,0	424	
1960	4,92	910	1606	5,02	61,9	239	214	918	102	94,4	433	
1961	4,56	950	1589	5,11	62,6	247	218	944	105	99,2	422	
1962	4,71	957	1619	5,14	62,3	246	220	976	107	104	413	
1963	4,82	960	1660	5,11	63,3	250	212	990	113	110	407	
1964	4,79	1016	1717	5,23	65,6	251	217	1015	125	113	401	
1965	4,74	992	1822	5,30	65,3	245	210	1000	123	112	408	

TABLE IV - Enrolments in pre-primary and primary education (1950-1965)

(thousands)

(1)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
AUSTRIA																
Pre-Prim.	63,6	62,7	66,4	66,0	65,8	67,0	67,0	68,5	72,2	74,7	79,7	84,0	87,3	(90,0)	(93,0)	(96,0)
Prim.	856	845	830	813	781	747	729	716	704	712	722	720	725	737	752	772
Total:	920	908	897	879	847	814	796	785	776	787	802	804	813	(827)	(845)	(868)
BELGIUM																
Pre-Prim.	298	322	324	332	334	344	353	363	376	393	405	414	424	430	443	(452)
Prim.	669	725	154	793	824	849	866	883	890	902	919	927	936	951	967	980
Total:	967	1047	1077	1126	1158	1193	1219	1245	1266	1295	1324	1340	1359	1382	1410	(1432)
FRANCE																
Pre-Prim.	(1164)	1226	1225	1220	1271	1273	1284	1308	1296	1302	1374	1433	1536	1598	1692	1778
Prim.	(3872)	4095	4340	4603	4870	5182	5413	5569	5727	5848	5816	5773	5773	5664	5602	5524
Total:	(5036)	5321	5565	5823	6141	6455	6697	6877	7023	7150	7190	7206	7309	7262	7294	7302
LUXEMBURG																
Pre-Prim.	3,4	3,9	4,1	4,1	4,3	4,1	4,1	4,2	4,2	4,3	4,5	4,7	4,9	5,0	6,2	(6,5)
Prim.	29,1	28,6	28,4	28,7	28,8	28,8	28,8	28,9	27,4	29,2	31,0	31,7	32,1	33,2	34,7	35,1
Total:	32,5	32,5	32,5	32,8	33,0	32,9	33,1	31,6	33,5	35,5	36,4	37,0	38,3	40,9	(41,6)	(43,0)
NETHERLANDS																
Pre-Prim.	341	365	370	368	371	370	349	362	373	384	393	412	422	435	447	(460)
Prim.	1216	1240	1289	1357	1413	1452	1470	1479	1475	1448	1416	1398	1395	1398	(1400)	
Total:	1557	1604	1659	1725	1785	1822	1819	1841	1848	1832	1814	1810	1817	1831	1845	(1860)
IRELAND																
Pre-Prim.	137	144	146	143	141	144	142	143	145	144	143	145	144	144	(144)	(144)
Prim.	325	327	333	341	348	351	355	356	355	352	351	351	(351)	(351)	(351)	(351)
Total:	462	471	479	484	490	495	497	498	499	500	497	494	496	(495)	(495)	(495)
UNITED-KINGDOM																
Pre-Prim.	27,8	28,6	28,8	28,7	29,5	29,6	29,2	33,3	32,3	33,0	33,8	33,5	36,2	(36,6)	36,9	(37,3)
Prim.	4801	5036	5289	5422	5481	5481	5483	5507	5284	5171	5088	5077	5092	(5158)	5222	(5319)
Total:	4829	5065	5318	5451	5511	5512	5540	5316	5204	5121	5111	5128	(5195)	5259	(5356)	

TABLE IV - Enrolments in pre-primary and primary education (1950-1965)
(contd.)

		(thousands)															
(2)		1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GREECE																	
Pre-Prim.	(13,0)	(15,5)	(18,5)	(21,0)	24,1	27,7	28,7	29,9	35,8	38,8	40,2	43,9	45,1	50,3	51,2	54,0	
Prim.	(940)	(940)	(940)	(940)	944	948	937	972	945	927	921	928	929	925	966	966	(950)
Total:	(953)	(956)	(959)	(961)	968	975	965	1002	981	966	962	972	974	975	1017	1004	
ITALY																	
Pre-Prim.	932	990	1012	1043	1052	1068	1072	1080	1088	1132	1154	1195	1233	1268	1305	1335	
Prim.	4640	4443	4493	4556	4656	4779	4868	4820	4734	4590	4498	4469	4410	4425	4459	4520	
Total:	5572	5433	5505	5600	5708	5847	5940	5900	5823	5722	5652	5664	5642	5693	5774	5856	
PORTUGAL																	
Pre-Prim.	2,0	3,2	4,3	4,8	5,3	4,9	4,8	5,0	5,2	6,1	6,5	7,0	8,0	9,4	10,4	11,3	
Prim.	643	673	759	795	814	829	842	852	857	869	887	887	887	894	894	892	
Total:	645	676	764	800	819	834	847	857	863	875	894	894	894	892	892	904	
CANADA																	
Pre-Prim.	(70)	83	95	92	96	103	112	122	132	139	146	158	169	184	204	227	
Prim.	(2070)	2147	2265	2415	2558	2681	2786	2908	3033	3155	3267	3357	3436	3526	3620	3620	3620
Total:	(2140)	2230	2360	2507	2654	2784	2898	3030	3165	3294	3413	3515	3605	3710	3824	3922	
UNITED STATES																	
Pre-Prim.	1346	1516	1687	1809	1724	1838	2002	2136	2205	2293	2382	2456	2573	2591	2672	2743	
Prim.	21738	22443	23443	24478	25643	26494	27273	27991	29015	30119	31009	31322	32083	32731	33543	34109	
Total:	23084	23959	25130	26287	27367	28332	29275	30127	31220	32412	33321	33778	34656	35322	36221	36352	
JAPAN																	
Pre-Prim.	225	244	371	520	612	644	651	663	674	700	742	799	856	936	1061	1128	
Prim.	11191	11423	11148	11225	11751	12267	12616	12956	13492	13375	12591	11811	11057	10471	10031	9716	
Total:	11416	11667	11519	11745	12363	12911	13267	13619	14166	14075	13333	12610	11913	11407	11092	10714	

TABLE V - Enrolments in secondary education (General, technical and vocational, and teacher training) (1950-1955)
(thousands)

							1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY																						
G	817	879	948	1018	1073	1099	1082	1072	1094	1170	1175	1186	1254	1328	1388	1497						
T	1832	2024	2218	2309	2442	2511	2485	2278	2209	2026	1847	1830	1862	1956	2013	2068						
Total	2649	2903	3166	3328	3515	3610	3567	3350	3303	3196	3022	3016	3116	3284	3400	3565						
AUSTRIA																						
G	55,1	61,5	67,2	73,0	78,1	80,6	81,7	84,2	85,4	85,1	83,4	81,5	80,7	82,1	85,6	88,9						
T	111	111	117	139	164	189	196	198	194	186	178	182	186	193	195	198						
N	4,9	4,7	4,1	4,6	4,7	5,0	5,3	5,5	5,8	6,2	6,8	7,6	8,3	7,6	6,6	6,1						
Total	171	177	189	217	247	275	283	288	285	278	268	272	277	283	286	293						
BELGIUM																						
G	231	238	234	234	232	237	243	248	262	276	292	294	297	301	300	301						
T	(121)	(124)	128	133	135	137	146	164	187	208	216	224	265	280	295	318						
N	11,6	13,2	13,9	13,9	14,9	15,3	15,4	15,5	15,2	16,7	19,1	22,2	24,3	25,3	24,8	23,4						
Total	(364)	(375)	376	381	382	389	404	427	464	501	527	541	586	606	620	642						
FRANCE																						
G	767	806	843	891	950	1019	1102	1241	1387	1550	1697	1872	...	...	...	...		
T	(323)	(342)	(354)	(376)	(393)	408	401	435	468	511	542	613	...	...	...	...		
N	(9,0)	(9,2)	(8,3)	8,5	6,6	6,9	9,0	10,9	10,6	10,5	12,8	13,1	15,3	14,9	16,2	16,4						
Total	(1099)	(1157)	(1205)	(1275)	(1350)	1434	1512	1687	1866	2071	2252	2498	2774	2927	3082	3249						
LUXEMBURG																						
G	5,8	6,1	5,8	6,0	6,3	6,5	6,5	6,5	6,6	5,9	6,2	6,3	6,5	7,0	(7,4)							
T	3,0	3,2	3,2	3,1	3,2	3,2	3,2	3,4	3,6	3,8	3,8	3,9	4,1	4,1	(4,4)							
N	0,1	0,1	0,1	0,1	0,2	0,2	0,2	0,2	0,2	0,1	0,1	0,1	0,1	0,2	0,2	(0,2)						
Total	8,9	9,4	9,2	9,2	9,6	9,8	9,9	10,1	10,4	10,7	9,8	10,2	10,5	10,8	11,5	(12,0)						
NETHERLANDS																						
G	236	247	261	276	294	317	346	373	411	450	480	495	502	510	517	526						
T	324	333	336	345	365	391	412	436	473	499	524	535	545	544	558	(572)						
Total	560	580	597	622	659	708	758	808	884	949	1004	1030	1042	1054	1075	(1100)						

TABLE V - Enrolments in secondary education (general, technical and vocational, and teacher training) (1950-1965) (Contd.)

(1-thousands)

		1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
DENMARK																	
G	91,0	95,6	99,3	104	111	120	130	143	160	144	118	115	111	111	110	110	
T	115	114	115	120	125	124	126	124	132	137	146	155	159	160	161	(163)	
N	0,9	1,0	0,5	1,1	1,1	1,2	1,4	1,3	1,9	2,0	2,1	1,9	2,5	2,8	2,8	2,9	
Total	207	211	215	225	237	246	257	269	294	283	266	272	273	273	274	(276)	
FINLAND																	
G	95,0	99,9	107	115	123	134	146	162	181	200	215	228	240	249	258	268	
T	(26,4)	(28,2)	29,7	31,8	35,8	39,2	41,2	45,3	49,9	53,1	55,9	60,8	67,3	73,6	(75,9)	77,0	
N	1,6	1,9	2,1	2,3	2,3	2,3	2,2	2,0	1,7	1,7	1,6	1,6	1,7	1,9	2,1	2,0	
Total	(123)	(130)	139	149	161	176	190	209	233	255	272	291	309	325	(336)	347	
IRELAND																	
G	53,8	55,6	57,9	59,8	61,9	64,9	68,5	68,2	75,8	79,7	83,2	87,0	91,7	(96,0)	(100)	(105)	
T	94,3	96,3	96,4	99,5	98,0	101	95,4	92,4	95,2	98,8	98,4	103	107	106	110	(112)	
N	1,1	1,2	1,2	1,2	1,3	1,4	1,5	1,5	1,5	1,5	1,5	1,5	1,0	1,0	1,0	(1,0)	
Total	149	153	155	160	161	167	165	162	172	180	183	191	200	(203)	(211)	(218)	
NORWAY																	
G	(54,0)	59,9	64,0	68,3	72,2	75,6	83,1	93,1	109	125	143	(152)	160	167	175	184	
T	(36,0)	(38,0)	41,5	44,1	43,6	44,2	46,2	47,2	50,5	53,2	(53,0)	(52,0)	51,8	57,0	61,6	64,1	
Total	(90,0)	(98,0)	106	112	116	120	129	140	159	178	(196)	(204)	212	224	236	248	
SWEDEN																	
G	(130)	140	149	158	166	176	190	199	206	215	222	219	215	196	176	155	
T	(24,4)	27,3	28,8	33,6	34,6	36,9	41,6	48,4	57,2	66,8	73,8	83,0	93,7	104	115	122	
N	6,5	6,2	5,9	5,6	5,3	5,0	4,3	3,5	3,5	3,8	3,8	3,9	4,4	4,8	4,7	4,8	
Total	161	174	184	197	206	218	236	251	266	286	300	306	313	305	296	282	
SPAIN																	
G	222	235	250	262	293	328	371	405	421	448	474	564	623	682	745	874	
T	(133)	135	128	130	133	126	123	125	131	142	149	158	172	191	(211)		
N	21,1	24,4	25,4	25,3	25,2	28,6	34,9	34,8	40,4	41,6	42,1	43,1	45,9	50,4	58,3	63,1	
Total	376	394	408	415	448	489	532	563	584	621	655	756	827	905	994	1108	

TABLE V - Enrolments in secondary education (general, technical and vocational, and teacher training) (1950-1965) (Contd.)

(3)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GREECE																
G	...	...	...	196	200	203	217	233	251	265	292	306	314	...	...	...
T	...	...	...	...	...	53,7	58,3	57,0	59,2	61,2	...	...	...	...	...	...
Total	...	...	...	...	...	256	276	290	310	326	...	...	...	...	...	...
ITALY																
G	879	955	1030	1053	1080	1095	1122	1218	1348	1512	1624	1757	1822	1929	1998	2084
T	165	189	211	244	276	308	334	361	387	412	459	516	580	640	715	765
N	70,5	79,5	91,4	100	107	108	109	108	105	103	106	120	132	150	180	211
Total	1114	1224	1332	1398	1463	1511	1565	1688	1840	2028	2189	2393	2534	2720	2892	3060
PORTUGAL																
G	48,5	51,6	54,4	58,7	62,7	68,9	76,6	83,0	91,0	102	112	118	129	139	145	150
T	39,0	39,2	39,7	42,5	46,0	(52,0)	57,1	(67,0)	75,8	(89,0)	101	(114)	(126)	(137)	150	(164)
N	2,3	2,0	1,9	2,3	2,7	2,7	2,7	(2,8)	2,9	3,6	(4,3)	4,5	4,2	3,4	2,8	2,7
Total	89,9	92,8	96,0	104	111	(124)	136	(153)	170	(195)	(217)	(237)	(260)	(279)	297	(316)
TURKEY																
G	90,4	97,3	112	124	147	167	200	237	274	317	367	407	439	447	452	548
T	36,7	36,0	36,1	42,2	49,7	59,2	63,0	67,7	71,2	76,1	84,2	88,2	93,2	112	119	134
N	16,3	15,8	14,5	15,2	14,5	15,3	16,5	18,2	19,6	21,1	23,3	26,7	31,8	36,1	42,3	47,8
Total	143	149	162	181	212	241	279	323	365	415	474	522	564	595	614	730
YUGOSLAVIA																
G	(60,0)	68,5	(73,0)	77,6	86,8	83,3	84,1	80,8	77,6	78,8	79,7	94,7	116	142	162	185
T	(187)	(156)	(144)	143	141	157	174	189	207	229	255	278	300	333	(381)	400
N	28,0	24,7	23,1	20,8	21,8	20,5	20,9	21,6	23,6	25,8	28,0	30,3	31,9	28,7	(29,0)	29,1
Total	(275)	(249)	(240)	242	250	261	280	291	309	334	363	403	448	503	(572)	614

TABLE VI - Enrolments in higher education (university and non-university) (1950-1965)

(thousands)

(1)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY																
Univ.	111	113	115	122	129	(152)	174	190	189	206	219	232	242	247	253	
Non-Univ	(24,7)	(29,2)	(32,3)	(36,8)	(41,3)	(47,4)	(52,5)	(59,7)	68,7	73,0	83,8	94,0	101	107	114	115
Total	(135)	(141)	(145)	(163)	(177)	(204)	(234)	258	262	289	313	333	349	361	368	
AUSTRIA																
Total	(21,0)	20,7	18,8	(18,4)	18,0	19,1	20,9	24,8	29,8	33,4	38,5	42,6	45,7	47,4	48,1	48,8
BELGIUM																
Univ.	20,2	20,7	21,8	22,5	23,3	24,5	25,7	27,1	28,3	29,1	30,7	32,7	35,4	38,4	42,5	48,8
Non-Univ	(10,0)	(10,8)	11,6	12,5	13,4	13,9	16,0	17,2	18,7	19,8	21,3	23,8	28,1	30,5	33,0	(35,6)
Total	(30,2)	(31,5)	(33,4)	35,0	36,7	38,4	41,7	44,3	47,0	48,9	52,0	56,5	63,5	68,9	75,5	(84,4)
FRANCE																
Univ.	(144)	148	(152)	156	161	163	175	185	201	214	219	248	286	321	359	403
Non-Univ	(43,4)	(45,5)	(46,7)	(48,1)	49,8	51,9	52,6	53,1	58,8	63,8	67,2	73,0	78,9	93,3	103	121
Total	(187)	(193)	(199)	(205)	211	215	228	238	259	278	286	321	364	414	462	524
NETHERLANDS																
Univ.	29,7	29,9	28,7	28,0	28,8	29,6	30,9	32,6	35,1	37,7	40,7	43,9	47,9	52,4	58,4	64,4
Non-Univ	20,1	(20,8)	22,9	23,8	26,2	27,9	31,3	34,4	37,9	42,1	44,9	48,1	50,0	51,7	55,1	59,6
Total	49,8	(50,7)	51,6	51,8	55,0	57,5	62,2	67,0	73,0	79,8	85,6	92,0	97,9	104	114	124
SWITZERLAND																
Univ.	16,5	16,0	15,6	15,6	15,6	16,0	16,5	17,6	18,8	19,9	21,3	23,4	25,7	27,8	30,4	32,9
Non-Univ	(2,6)	2,7	2,8	2,9	2,9	3,2	3,5	3,9	4,4	4,9	5,8	6,3	6,7	7,3	7,9	8,0
Total	(19,1)	18,7	18,4	18,5	18,5	19,2	20,0	21,5	23,2	24,8	27,1	29,7	32,4	35,1	38,3	40,9
DENMARK																
Univ.	13,2	12,8	12,5	12,2	12,0	12,1	12,5	13,0	13,9	15,3	16,5	18,4	20,6	23,3	27,7	31,9
Non-Univ	7,4	7,5	7,8	8,5	9,1	9,7	10,7	11,9	13,4	14,1	15,9	16,1	17,2	18,5	19,8	20,1
Total	20,6	20,3	20,7	21,1	21,8	23,2	24,9	27,3	29,4	32,4	34,5	37,8	41,8	47,5	57,0	
FINLAND																
Total	(12,0)	(13,0)	14,4	14,9	15,5	16,8	17,0	18,1	19,5	21,4	23,6	26,8	29,6	32,6	35,9	40,9
IRELAND																
Univ.	7,3	7,2	7,5	7,7	8,1	8,1	8,5	8,8	9,6	10,1	11,1	11,4	12,4	13,3	14,2	(15,1)
Non-Univ	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
									11.9	12.9	13.4	14.7	15.2	16.2	17.1	

TABLE VI - Enrolments in higher education (university and non-university) (1950-1965) (Contd.)

(thousands)

(2)		1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
NORWAY																	
Univ.	7,0	6,0	5,6	5,6	5,7	5,7	5,9	6,6	7,7	8,6	9,4	10,9	12,5	14,7	16,9	19,4	
Non-Univ.	8,4	9,5
Total	25,3	28,9
UNITED KINGDOM																	
Univ.	106	104	102	101	102	106	111	117	121	126	132	137	142	151	165	183	
Non-Univ.	(74,3)	(78,2)	(82,7)	(87,1)	(93,7)	(102)	(114)	(127)	(136)	(143)	(157)	(181)	(208)	(225)	(242)	243	
Total	(180)	(183)	(194)	(188)	(196)	(208)	(225)	(244)	(258)	(269)	(288)	(318)	(351)	(376)	407	432	
SWEDEN																	
Univ.	16,5	17,4	18,3	19,6	20,7	22,3	24,4	26,0	28,7	31,5	35,5	38,7	42,7	50,3	61,8	70,6	
Non-Univ.	(4,5)	4,7	4,7	4,8	4,8	4,9	5,0	5,0	4,3	4,2	4,2	4,5	5,3	6,6	7,5	6,6	7,0
Total	(21,0)	22,1	23,0	24,4	25,5	27,2	29,4	30,3	32,9	35,7	40,0	44,0	49,3	57,8	68,4	77,6	
SPAIN																	
Univ.	54,6	56,4	61,5	62,9	62,2	61,2	66,7	69,1	68,1	70,6	69,3	73,5	80,1	91,5	98,1	(105)	
Non-Univ.	(22,8)	(24,4)	(26,9)	(29,2)	(30,0)	(30,7)	(32,4)	(32,4)	36,7	39,2	40,6	41,5	43,0	44,7	47,7	(49,3)	
Total	(77,4)	(80,8)	(88,4)	(92,1)	(92,2)	(91,9)	(99,1)	102	105	110	115	123	136	146	(156)		
GREECE																	
Univ.	(13,5)	(14,0)	(14,5)	(15,5)	(16,5)	18,0	19,1	19,3	22,6	24,7	25,8	28,2	32,1	39,9	49,7	(62,4)	
Non-Univ.	(2,5)	(2,5)	(2,5)	(2,5)	(2,5)	2,9	2,5	2,3	2,3	2,6	2,5	2,4	3,3	3,5	3,6	(3,6)	
Total	(16,0)	(16,5)	(17,0)	(18,0)	(19,0)	20,9	21,6	21,6	24,9	27,3	28,3	30,6	35,4	43,4	53,3	(66,0)	
ITALY																	
Univ.	228	223	220	215	210	208	210	219	229	243	263	283	307	329	355	(373)	
Non-Univ.	12,4	13,4	14,3	14,8	13,5	14,5	15,7	15,8	17,1	19,3	21,7	21,2	22,0	22,8	24,6	(27,0)	
Total	241	236	234	230	223	226	235	246	263	284	304	329	352	379	(405)		
PORTUGAL																	
Univ.	12,4	12,8	12,4	13,4	13,5	(14,3)	15,1	(16,1)	17,1	(18,6)	20,0	(21,3)	22,5	24,2	25,8	(27,0)	
Non-Univ.	(3,1)	(3,8)	(3,8)	3,9	3,9	(4,2)	4,5	(4,8)	5,1	(5,1)	5,2	(5,6)	6,1	(7,0)	8,0	(9,0)	
Total	(15,5)	(16,6)	(16,2)	17,3	17,4	(18,5)	19,6	(20,9)	22,2	(23,7)	25,2	(26,9)	28,6	(31,2)	33,8	(36,0)	

TABLE VI - Enrolments in higher education (university and non-university) (1950-1965) (Contd.)

(3)	{ thousands)															
	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
TURKEY																
Univ.	22,6	21,7	21,8	20,3	24,0	32,1	33,8	35,0	36,7	42,0	48,1	54,4	52,7	54,4	59,9	66,1
Non-Univ.	(1,4)	(2,0)	(2,6)	(3,0)	(4,2)	(6,4)	(7,8)	(9,1)	10,8	13,2	18,6	17,8	21,6	25,8	25,7	32,6
Total	(24,0)	(23,7)	(24,4)	(23,3)	(28,2)	(38,5)	(41,6)	(44,1)	47,5	55,2	66,7	72,2	74,3	80,2	85,6	98,7
YUGOSLAVIA																
Univ.	(48,7)	48,8	48,9	52,8	62,9	62,1	62,2	71,4	81,4	86,0	109	117	112	107	107	116
Non-Univ.	(6,3)	6,0	5,5	4,7	7,1	7,6	9,7	11,5	15,5	18,8	31,7	40,9	47,8	53,4	63,1	68,6
Total	(55,0)	54,8	54,4	57,5	70,0	69,7	71,9	82,9	96,9	105	141	158	160	161	171	185
CANADA																
Total	(83,0)	(83,9)	(84,4)	(85,9)	91,7	100	109	124	146	158	176	201	221	256	285	326
UNITED STATES																
Total	2297	2116	2148	2251	2469	2679	2947	3068	3259	3402	3610	3891	4207	4529	4988	5570
JAPAN																
Total	400	421	502	536	581	610	630	642	653	677	712	764	835	916	980	1085
20																

TABLE VII - Enrolments in university education by field of study (1950-1965) (Contd.)
(thousands)

		1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY																	
Science	41,3	42,9	44,0	44,7	46,0	48,3	57,0	65,6	70,5	68,9	74,1	78,1	79,4	81,6	81,2	80,5	
Medicine	19,3	17,4	16,5	16,4	17,1	18,2	22,3	25,7	28,8	30,0	34,0	37,9	40,7	42,1	42,9	43,7	
Others	50,0	51,0	52,5	54,3	58,5	62,6	72,7	82,8	90,4	90,2	97,4	103	112	118	123	129	
Total	111	111	113	115	122	129	152	174	190	189	205	219	232	242	247	253	
BELGIUM																	
Science	4,9	5,0	5,2	5,4	5,8	6,1	6,5	7,3	7,8	8,3	8,8	9,3	10,0	10,7	11,5	12,7	
Medicine	6,4	6,5	6,6	6,6	6,7	6,7	7,1	7,3	7,6	7,6	7,9	8,2	8,6	9,0	9,7	11,0	
Others	8,9	9,2	10,0	10,5	10,8	11,7	12,1	12,5	12,9	13,2	14,0	15,2	16,8	18,7	21,3	25,1	
Total	20,2	20,7	21,8	22,5	23,3	24,5	25,7	27,1	28,3	29,1	30,7	32,7	35,4	38,4	42,5	48,8	
FRANCE																	
Science	(39,6)	42,2	(43,6)	46,8	51,1	54,9	61,1	69,3	80,2	88,7	92,4	99,9	115	128	138	152	
Medicine	37,4	36,6	37,2	37,7	38,0	38,5	39,5	40,2	40,7	39,3	45,5	48,0	51,5	55,2	61,8		
Others	67,0	68,2	71,8	72,4	72,5	70,4	75,3	76,2	80,1	84,4	87,4	102	123	142	165	189	
Total	(144)	148	(152)	156	161	163	175	185	201	214	219	248	286	321	359	403	
NETHERLANDS																	
Science	10,2	10,2	9,8	9,6	9,8	10,2	10,9	11,7	13,0	14,0	15,4	16,8	18,2	19,6	21,6	23,1	
Medicine	8,2	8,0	7,6	7,1	7,0	6,8	6,6	6,4	6,5	6,7	6,9	7,1	7,7	8,4	9,3	10,1	
Others	11,3	11,7	11,3	11,3	12,0	12,6	13,4	14,5	15,6	17,0	18,4	20,0	22,0	24,4	27,5	31,2	
Total	29,7	29,9	28,7	28,0	28,8	29,6	30,9	32,6	35,1	37,7	40,7	43,9	47,9	52,4	58,4	64,4	
SWITZERLAND																	
Science	5,7	5,3	5,3	5,0	5,1	5,3	5,6	6,2	6,8	7,2	7,7	8,4	9,1	9,9	10,7	11,5	
Medicine	3,7	3,8	3,5	3,8	3,7	3,7	3,6	3,6	3,6	3,7	4,1	4,2	4,5	4,8	5,3		
Others	7,1	6,9	6,8	6,8	7,0	7,3	7,8	8,4	9,1	9,9	10,9	12,3	13,4	14,9	16,0		
Total	16,5	16,0	15,6	15,6	16,0	16,5	17,6	18,8	19,9	21,3	23,4	25,7	27,8	30,4	32,9		

TABLE VII - Enrolments in university education by field of study (1950-1965) (Contd.)

(thousands)

(2)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
DENMARK																
Science	3,7	3,6	3,6	3,5	3,5	3,6	3,9	4,2	4,4	4,9	5,3	5,7	6,1	6,8	7,9	8,6
Medicine	3,5	3,4	3,4	3,3	3,4	3,4	3,6	3,7	4,0	4,5	4,7	5,1	5,5	5,9	6,5	7,2
Others	6,0	5,8	5,5	5,2	5,2	5,1	5,0	5,1	5,5	5,9	6,5	7,6	9,0	10,6	13,3	16,1
Total	13,2	12,8	12,5	12,2	12,0	12,1	12,5	13,0	13,9	15,3	16,5	18,4	20,6	23,3	27,7	31,9
IRELAND																
Science	1,7	1,7	1,8	1,9	2,1	2,3	2,5	2,6	2,8	3,0	3,1	3,3	3,5	3,8	4,0	4,3
Medicine	2,1	2,0	1,9	1,9	1,9	1,8	1,7	1,7	1,7	1,8	1,9	2,0	2,2	2,3	2,4	
Others	3,5	3,5	3,7	3,9	4,1	4,1	4,3	4,5	5,1	5,5	6,1	6,2	6,9	7,4	7,9	8,4
Total	7,3	7,2	7,5	7,7	8,1	8,1	8,5	8,8	9,6	10,1	11,1	11,4	12,4	13,3	14,2	15,1
NORWAY																
Science	2,2	2,2	2,2	2,4	2,5	2,6	3,0	3,0	3,5	3,9	4,3	4,8	5,4	6,1	6,7	7,8
Medicine	1,0	0,9	0,9	0,9	0,9	0,9	1,0	1,0	1,0	1,1	1,1	1,2	1,2	1,4	1,4	1,5
Others	3,8	2,9	2,5	2,3	2,3	2,2	1,9	2,1	2,7	3,2	3,5	4,3	5,2	6,6	8,1	10,1
Total	7,0	6,0	5,6	5,6	5,7	5,7	5,9	6,6	7,7	8,6	9,4	10,9	12,5	14,7	16,9	19,4
SWEDEN																
Science	5,4	5,6	5,7	6,1	6,3	6,7	7,4	7,7	9,0	9,8	11,0	12,1	14,0	16,0	17,9	19,7
Medicine	2,9	3,1	3,2	3,3	3,4	3,6	3,6	4,0	4,2	4,5	4,8	5,0	5,2	5,6	6,0	6,7
Others	8,2	8,7	9,4	10,2	11,0	12,0	13,4	14,3	15,5	17,2	19,7	21,6	23,5	28,7	37,9	44,2
Total	16,5	17,4	18,3	19,6	20,7	22,3	24,4	26,0	28,7	31,5	35,5	38,7	42,7	50,3	61,8	70,6
SPAIN																
Science	14,6	14,3	16,9	14,5	13,5	13,7	14,8	16,8	17,0	20,2	21,1	23,4	26,1	29,7	33,0	34,7
Medicine	17,0	18,4	19,5	22,1	21,9	22,5	23,2	23,9	23,4	22,5	19,5	20,1	21,7	24,9	24,4	28,3
Others	23,0	23,7	25,1	26,3	26,6	25,0	28,7	28,4	27,7	27,9	28,7	30,0	32,3	36,9	40,7	43,0
Total	54,6	56,4	61,5	62,9	62,2	61,2	66,7	69,1	68,1	70,6	69,3	73,5	80,1	91,5	98,1	(106)

TABLE VII - Enrolments in university education by field of study (1950-1965) (contd.)

(In thousands)

(3)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GREECE																
Science	...	...	...	...	...	3.6	3.9	4.2	4.4	4.8	5.8	6.8	8.4	10.8	13.7	(17.2)
Medicine	...	...	...	...	...	3.3	2.8	3.1	3.4	4.0	4.5	5.2	5.9	6.8	8.9	(11.2)
Others	...	...	...	...	...	11.1	12.4	12.0	14.8	15.9	15.5	16.2	17.8	22.3	27.1	(34.0)
Total	(13.5)	(14.0)	(14.5)	(15.5)	(16.5)	18.0	19.1	19.3	22.6	24.7	25.8	28.2	32.1	37.0	49.7	(62.4)
ITALY																
Science	64.2	61.9	61.2	59.0	57.6	56.3	56.1	58.3	62.1	65.8	69.7	74.4	79.4	85.4	90.4	(94.5)
Medicine	49.2	46.5	45.8	42.7	39.9	36.9	33.8	32.5	31.7	31.9	31.4	31.5	32.2	32.1	34.4	(35.9)
Others	115	114	113	113	112	115	120	128	135	146	162	177	195	212	230	(248)
Total	228	223	220	215	210	208	210	219	229	243	263	283	307	329	355	(378)
PORTUGAL																
Science	5.5	5.4	4.8	5.2	5.0	(5.2)	5.4	(5.9)	6.5	(7.2)	7.9	(8.5)	9.1	(9.6)	10.0	(10.3)
Medicine	2.8	2.8	2.8	2.9	3.1	(3.2)	3.3	(3.3)	3.3	(3.3)	3.3	(3.1)	2.9	(2.0)	3.2	(3.2)
Others	4.1	4.6	4.8	5.3	5.4	(5.9)	6.4	(6.9)	7.3	(8.1)	8.8	(9.7)	10.2	(11.6)	12.6	(13.5)
Total	12.4	12.8	12.4	13.4	13.5	(14.3)	15.1	(16.1)	17.1	(18.6)	20.0	(21.3)	22.5	(24.2)	25.8	(27.0)
TURKEY																
Science	4.7	4.2	4.5	4.2	6.0	7.1	7.2	9.3	10.0	12.6	11.9	14.1	13.0	12.7	14.6	17.1
Medicine	4.3	4.5	4.8	4.1	4.4	4.1	4.2	4.0	4.9	5.0	5.3	5.2	5.3	7.7	9.2	10.4
Others	13.6	13.0	12.5	12.0	13.6	20.9	22.4	21.7	21.8	24.4	30.9	35.1	34.4	34.0	36.1	38.6
Total	22.6	21.7	21.8	20.3	24.0	32.1	33.8	35.0	36.7	42.0	48.1	54.4	52.7	54.4	59.9	66.1
YUGOSLAVIA																
Science	(19.9)	19.9	18.7	19.3	23.2	23.5	22.9	25.7	28.9	31.5	43.9	45.5	45.7	44.4	44.0	48.0
Medicine	(8.8)	8.8	7.7	8.8	9.5	9.4	8.0	8.9	10.3	10.9	12.5	13.7	14.0	15.5	15.4	15.2
Others	(20.0)	20.1	22.5	24.7	30.2	29.2	31.3	36.8	42.0	43.6	52.6	57.8	52.2	49.1	42.6	24.1
Total	(48.7)	48.8	48.9	52.8	62.9	62.1	62.2	71.4	81.4	86.0	109	117	112	107	107	116

TABLE VIII - Total enrolments (1950-1965)

(thousands)

(1)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY																
1	6314	5849	5425	5460	5536	4936	4858	4647	4953	4996	5154	5205	5445	5469	5525	5607
2	2649	2903	3166	3526	3525	3610	3567	3350	3303	3196	3022	3016	3116	3284	3400	3565
3	135	141	145	152	163	177	204	234	258	262	289	313	333	349	361	368
Miscellaneous	89.6	97.4	104	105	103	105	104	105	112	116	124	132	150	160	171	182
Total	9188	8990	8840	9025	8917	8322	8743	8536	6626	8572	8589	8669	9044	9262	9457	9722
AUSTRIA																
1	920	908	897	879	847	814	796	765	776	787	802	804	813	821	845	868
2	171	177	189	217	247	275	283	286	285	278	268	272	277	283	286	293
3	21.0	20.7	18.8	18.4	18.0	19.1	20.9	24.8	29.8	33.4	38.5	42.6	45.7	47.4	48.1	48.8
Miscellaneous	10.6	11.8	13.5	14.6	16.2	17.3	18.3	19.3	20.6	21.6	22.1	22.0	21.7	21.3	21.8	22.2
Total	1123	1115	1118	1129	1128	1125	1118	1117	1112	1120	1131	1141	1157	1179	1201	1232
BELGIUM																
1	967	1047	1077	1126	1158	1193	1219	1245	1266	1295	1324	1340	1359	1382	1410	1432
2	364	375	376	381	382	389	404	427	464	501	527	541	586	606	620	642
3	30.2	31.5	33.4	35.0	36.7	38.4	41.7	44.3	47.0	48.9	52.0	56.5	63.5	68.9	75.5	84.4
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1361	1454	1486	1542	1577	1620	1665	1716	1777	1845	1903	1938	2009	2057	2106	2158
FRANCE																
1	5036	5321	5565	5823	6141	6455	6697	6877	7023	7150	7190	7206	7303	7262	7294	7302
2	1099	1157	1205	1275	1350	1434	1512	1687	1866	2071	2252	2498	2774	2927	3082	3249
3	187	193	199	205	211	215	228	238	259	278	286	321	364	414	462	524
Miscellaneous	38	43	45	57	50	57	59	62	70	82	90	96	93	101	113	126
Total	6360	6714	7014	7360	7752	8161	8496	8864	9218	9581	9818	10121	10540	10704	10951	11201

TABLE VIII - Total enrolments (1950-1965) (Contd.)

(2)

(thousands)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
LUXEMBOURG																
1	32,5	32,5	32,5	32,8	33,0	32,9	33,1	31,6	33,5	35,5	36,4	37,0	38,3	40,9	41,0	43,0
2	8,9	9,4	9,2	9,2	9,6	9,8	9,9	10,1	10,4	10,7	9,8	10,2	10,5	10,8	11,5	12,0
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Miscellaneous	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NETHERLANDS																
1	1557	1604	1659	1725	1785	1822	1819	1841	1848	1832	1814	1810	1817	1831	1845	1860
2	560	580	597	622	659	708	758	808	884	949	1004	1030	1046	1054	1075	1100
3	49,8	50,7	51,6	51,8	55,0	57,5	62,2	67,0	73,0	79,8	85,6	92,0	97,9	104	114	124
Miscellaneous	32,9	35,3	37,4	39,1	41,2	43,5	45,7	47,0	49,6	52,5	54,6	56,1	57,7	59,2	60,8	62,0
Total	2200	2270	2345	2438	2540	2632	2685	2763	2855	2914	2959	2988	3021	3048	3095	3146
SWITZERLAND																
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	19,1	18,7	18,4	18,5	18,5	19,2	20,0	21,5	23,2	24,3	27,1	29,7	32,4	35,1	38,3	40,9
Miscellaneous	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
DENMARK																
1	443	462	485	509	527	536	537	533	521	547	587	576	580	583	569	573
2	207	211	215	225	237	246	257	269	294	283	266	272	273	272	274	276
3	20,6	20,3	20,3	20,7	21,1	21,8	23,2	24,9	27,3	29,4	32,4	34,5	37,8	41,8	47,5	52,0
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	671	693	720	755	785	804	817	827	842	859	885	891	898	891	901	901

TABLE VIII - Total enrolments (1950-1965) (Contd.)

(thousands)

(3)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	
FINLAND																	
1	489	493	516	541	565	591	605	622	629	633	626	612	596	583	565	544	
2	123	130	139	149	161	176	190	209	233	255	272	291	309	325	336	347	
3	12,0	13,0	14,4	14,9	15,5	16,8	17,0	18,1	19,5	21,4	23,6	26,8	29,6	32,6	35,9	40,9	
Miscellaneous	0,6	0,7	0,6	0,6	0,6	0,6	0,7	0,7	0,7	0,7	0,6	0,7	0,7	0,7	0,7	0,7	
Total	625	639	670	706	742	784	813	850	882	910	922	931	935	941	938	933	
IRELAND																	
1	462	471	479	484	490	495	497	498	499	500	497	494	496	495	495	495	
2	149	153	155	160	161	167	165	162	172	180	183	191	200	203	211	218	
3	11,9	12,9	13,4	14,3	15,2	17,1
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	692	693	698	710	713	730
NORWAY																	
1	320	337	356	379	401	421	432	438	439	437	430	425	420	419	415	412	
2	90,0	98,0	106	112	116	120	129	140	159	178	196	204	212	224	236	248	
3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Miscellaneous	1,5	1,5	1,5	1,5	1,6	1,6	1,7	1,8	2,0	2,2	2,2	2,2	2,2	2,2	2,4	2,4	2,7
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
UNITED KINGDOM																	
1	4829	5065	5318	5451	5511	5512	5540	5316	5204	5111	5121	5128	5195	5259	5356		
2	2152	2180	2200	2242	2344	2495	2639	2819	3114	3283	3405	3432	3375	3399	3420	3450	
3	180	183	184	188	196	208	225	244	258	269	283	318	321	315	407	432	
Miscellaneous	159	170	176	181	187	194	202	203	207	295	304	322	334	335	333	374	
Total	7320	7598	7878	8062	8238	8408	8573	8906	8995	9051	9118	9159	9148	9203	9359	9215	

TABLE VIII - Total enrolments (1950-1965) (Contd.)

(thousands)

(4)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
SWEDEN																
1	651	685	729	759	793	817	830	836	837	843	841	838	856	867	878	
2	161	174	184	197	206	218	236	251	266	286	300	306	317	305	296	282
3	21,0	22,1	23,0	24,4	25,5	27,2	29,4	30,3	32,9	35,7	40,0	44,0	49,3	57,8	68,4	77,6
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	833	881	936	980	1025	1062	1095	1117	1135	1159	1183	1191	1200	1219	1231	1238
SPAIN																
1	2793	2830	2894	3011	3155	3169	3248	3310	3335	3370	3387	3410	3453	3505	3542	3624
2	376	394	408	415	448	489	532	563	584	621	658	756	827	905	994	1103
3	77,4	80,8	88,4	92,1	92,2	91,9	99,1	102	105	110	110	115	123	136	146	156
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	3246	3305	3390	3518	3695	3750	3879	3975	4024	4101	4155	4271	4403	4546	4682	4888
GREECE																
1	953	1056	959	961	968	975	965	1002	981	966	962	972	974	975	1017	1004
2	...	...	...	...	...	...	...	256	276	290	310	326	...	...	...	...
3	16,0	16,5	17,0	18,0	19,0	20,9	21,6	21,6	24,9	27,3	28,3	30,6	35,4	43,4	53,3	66,0
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	...	...	...	...	...	...	...	1243	1300	1296	1303	1316	...	...	...	...
ITALY																
1	5572	5433	5505	5600	5703	5847	5940	5900	5823	5722	5652	5664	5642	5693	5774	5856
2	1114	1224	1332	1398	1463	1511	1565	1688	1840	2028	2189	2393	2534	2720	2352	3060
3	241	236	234	230	223	223	226	235	246	263	284	304	323	352	371	403
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	6927	6893	7071	7228	7394	7581	7731	7823	7909	8013	8125	8361	8595	8765	9045	9221

TABLE VIII - Total enrolments (1950-1965) (Contd.)

		(thousands)															
		1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
PORTUGAL																	
1	645	676	764	800	819	834	847	857	863	875	894	894	895	892	905	904	
2	89,9	92,8	96,0	104	111	124	136	153	170	195	217	237	260	279	297	316	
3	15,5	16,6	16,2	17,3	17,4	18,3	19,6	20,9	22,2	23,7	25,2	26,9	28,6	31,2	33,8	36,0	
Miscellaneous	4,1	4,1	4,0	5,3	5,2	5,5	5,3	5,5	5,7	5,9	6,6	6,9	6,8	6,9	7,1	7,2	
Total	755	790	850	926	952	983	1008	1037	1061	1099	1143	1165	1191	1209	1243	1263	
TURKEY																	
1	1617	1643	1692	1763	1867	1984	2140	2260	2403	2515	2867	3175	3427	3644	3814	3924	
2	143	149	162	181	212	241	279	323	365	415	474	522	564	595	614	730	
3	24,0	23,7	24,4	23,5	28,2	385	41,6	44,1	47,5	55,2	66,7	72,2	74,3	80,2	85,6	98,7	
Miscellaneous	0,3	0,1	0,3	0,2	0,4	0,5	0,5	0,6	0,7	0,7	0,7	0,9	1,0	1,0	1,1	1,0	
Total	1784	1816	1879	1968	2108	2264	2461	2628	2816	2986	3408	3770	4066	4320	4515	4754	
YUGOSLAVIA																	
1	1854	1815	1823	1847	1918	2086	2175	2316	2427	2590	2764	2896	2960	2980	3000	2984	
2	275	249	240	242	250	261	280	291	309	334	363	403	448	503	572	614	
3	55,0	54,8	54,4	57,5	70,0	69,7	71,9	82,9	96,9	105	141	158	160	161	171	185	
Miscellaneous	19,4	20,6	21,8	33,7	35,1	28,9	27,5	27,7	29,1	30,6	32,2	33,3	36,1	38,4	40,7		
Total	2203	2139	2139	2170	2272	2452	2556	2717	2861	3058	3299	3489	3601	3680	3781	3824	
CANADA																	
1	2140	2230	2360	2507	2654	2784	2898	3030	3165	3294	3413	3515	3605	3710	3824	3922	
2	382	394	414	439	465	508	547	603	662	715	789	892	984	1071	1145	1205	
3	83,0	83,9	84,4	85,9	91,7	100	109	124	146	158	176	201	221	256	285	326	
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total	2605	2708	2858	3032	3211	3392	3554	3757	3973	4167	4378	4608	4810	5037	5254	5453	

TABLE VIII - Total enrolments (1950-1965) (Contd.)

(thousands)

(6)	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
UNITED STATES																
1	23084	23959	25130	26287	27367	28332	29275	30127	31220	32412	33391	33778	34656	35322	36221	36852
2	6526	6596	6651	7109	7434	7775	8274	8869	9320	9600	9981	10769	11560	12255	12791	13000
3	2297	2116	2148	2251	2469	2679	2947	3068	3259	3402	3610	3891	4207	4529	4988	5570
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	31907	32671	33929	35647	37270	38786	40496	42064	43799	45414	46982	48438	50423	52106	54000	55422
JAPAN																
1	11416	11667	11519	11745	12363	12911	13267	13619	14166	14075	13333	11610	11913	11407	11092	10914
2	7268	7323	7419	7715	8209	8476	8665	8616	8267	8396	9139	10044	10610	10861	11110	11040
3	400	421	502	536	581	610	630	642	653	677	712	764	835	916	980	1085
Miscellaneous	16,9	19,7	22,1	24,3	26,5	28,1	29,6	31,6	33,2	34,8	35,8	37,1	38,6	40,5	42,8	44,3
Total	19101	19431	19462	20020	21180	22025	22592	22909	23119	23183	23220	23459	23397	23225	23083	- 93 -

TABLE IX - Enrollment ratios (1st level) (1950-1965)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY	772	731	692	694	669	660	676	668	678	680	687	675	687	684	680	677
AUSTRIA	869	860	827	793	769	762	774	785	785	806	823	804	806	816	823	828
BELGIUM	870	926	929	952	962	958	945	934	939	943	940	949	958	966	971	
FRANCE	973	1009	1011	1011	1020	1004	993	981	934	923	939	941	887	880	931	934
LUXEMBURG	881	869	867	872	873	857	858	814	855	890	850	855	863	893	878	885
NETHERLANDS	886	878	863	864	869	866	846	839	827	809	792	791	805	816	821	824
DENMARK	625	635	642	655	665	667	661	656	644	683	745	749	765	779	767	775
FINLAND	693	684	680	681	685	691	692	697	681	672	662	656	657	649	638	
IRELAND	865	869	871	866	866	868	867	862	861	857	856	866	865	867	867	865
NORWAY	655	681	683	698	714	733	732	728	715	708	695	689	689	686	680	675
UNITED-KINGDOM	694	724	723	730	714	702	690	688	659	646	636	635	650	641	659	677
SWEDEN	625	644	660	666	680	687	689	691	696	713	738	742	754	784	805	825
SPAIN	587	594	601	607	613	618	624	625	628	633	634	632	629	633	630	630
GREECE	692	746	678	685	701	714	702	717	693	678	676	671	682	683	709	694
ITALY	700	672	675	684	700	722	736	731	722	702	679	689	690	702	709	708
PORTUGAL	404	423	478	502	511	518	523	517	497	519	523	521	516	514	520	514
TURKEY	328	323	325	330	341	353	362	364	369	367	400	427	446	459	465	463
YUGOSLAVIA	570	572	580	594	580	641	664	689	698	734	755	773	778	757	777	
CANADA	878	882	883	896	901	898	894	897	901	907	910	893	897	902	914	922
UNITED-STATES	949	956	941	939	936	929	921	914	921	923	913	912	926	929	937	934
JAPAN	626	650	623	613	616	628	643	663	694	700	659	622	614	616	629	643

TABLE X - Enrolment ratios (2nd level) (1950-1965)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY	329	353	377	383	401	419	432	411	407	395	403	420	442	457	469	
AUSTRIA	176	180	187	211	235	260	269	261	256	252	264	277	288	294	299	
BELGIUM	305	324	334	343	344	350	357	367	391	415	425	415	438	444	445	452
FRANCE	188	205	217	231	244	258	261	279	301	319	325	345	369	366	377	387
LUXEMBURG	237	254	247	245	253	257	256	259	266	274	244	247	251	254	261	264
NETHERLANDS	342	353	362	373	387	408	420	425	446	463	479	480	477	471	475	481
DENMARK	341	345	344	349	355	354	354	359	381	360	333	337	337	338	343	351
FINLAND	192	200	213	227	241	255	264	276	295	311	315	332	348	356	362	373
IRELAND	294	305	308	317	319	330	324	313	330	345	349	365	388	398	419	441
NORWAY	215	235	252	260	260	257	262	271	294	320	341	345	345	363	381	399
UNITED KINGDOM	323	336	334	338	347	363	377	386	414	428	435	431	420	424	425	427
SWEDEN	185	199	206	213	212	214	221	226	232	243	249	253	258	253	249	242
SPAIN	75	80	85	87	94	102	112	117	119	122	130	148	160	175	192	214
GREECE	...	...	...	...	...	...	...	183	198	209	228	241	...	...	...	...
ITALY	136	149	162	171	182	191	195	209	227	252	270	301	317	339	355	370
PORTUGAL	56	58	60	66	71	79	87	98	108	124	137	148	161	174	186	198
TURKEY	30	31	34	38	45	51	57	64	71	78	87	91	94	96	95	108
YUGOSLAVIA	78	71	68	72	74	81	91	95	100	102	113	126	137	149	155	169
CANADA	174	180	183	188	192	203	211	221	231	240	254	271	287	300	310	316
UNITED STATES	300	300	297	306	311	317	329	331	332	327	325	341	353	365	369	361
JAPAN	421	417	416	429	445	467	485	468	432	419	450	492	522	534	554	558

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TABLE XI - Enrollment ratios (1st and 2nd levels) (1950-1965)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY	762	748	733	727	713	705	708	685	693	697	707	722	747	760	765	767
AUSTRIA	725	725	717	714	704	695	689	681	670	680	699	709	723	734	743	750
BELGIUM	767	820	831	854	864	877	900	917	939	950	926	939	945	946	951	
FRANCE	740	780	802	821	842	855	868	884	870	881	902	900	872	858	874	871
LUXEMBURG	726	738	735	739	745	740	738	710	740	771	738	734	746	775	774	781
NETHERLANDS	824	830	829	840	854	866	864	872	881	881	880	872	864	858	859	861
DENMARK	649	659	665	680	696	702	704	705	710	716	730	722	723	727	722	736
FINLAND	601	604	613	621	631	648	656	673	686	699	689	688	685	679	669	664
IRELAND	788	797	802	807	812	824	822	814	826	836	836	845	870	880	899	920
NORWAY	599	623	641	661	675	690	697	703	709	717	715	701	685	694	702	711
UNITED-KINGDOM	690	723	719	721	723	728	734	757	758	756	753	745	732	742	739	737
SWEDEN	557	580	599	611	624	632	640	644	645	652	658	658	670	678	686	
SPAIN	425	434	446	462	485	494	510	519	517	515	522	529	534	544	554	572
GREECE	...	...	...	...	...	...	...	577	609	611	616	626	...	...	...	...
ITALY	559	551	561	571	584	599	612	621	633	645	646	671	679	694	707	714
PORTUGAL	307	320	359	380	390	403	411	417	420	439	455	462	470	473	489	493
TURKEY	241	240	244	252	266	280	294	303	313	320	353	375	391	400	403	408
YUGOSLAVIA	425	416	417	429	428	473	498	524	542	543	598	633	652	660	659	655
CANADA	718	732	740	757	768	777	782	791	801	810	820	821	828	837	845	850
UNITED-STATES	848	857	851	861	864	866	869	870	874	874	867	877	883	886	892	882
JAPAN	697	713	695	697	717	733	745	752	757	756	761	777	786	785	793	786

TABLE XII - Enrollment ratios(3rd level) (1950-1965)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY	37	38	40	41	44	47	52	59	60	58	61	66	70	74	79	87
AUSTRIA	43	43	39	39	42	48	59	71	76	80	83	81	80	82	89	
BELGIUM	46	48	51	54	58	62	69	75	81	84	91	103	117	127	138	152
FRANCE	57	59	61	63	66	69	74	79	86	93	99	114	131	146	159	174
NETHERLANDS	62	63	64	65	69	73	79	86	93	100	106	112	117	121	128	137
SWITZERLAND	55	55	53	53	52	55	57	59	64	69	74	71	71	76	77	
DENMARK	70	70	71	72	74	76	81	87	94	99	107	112	118	125	135	138
FINLAND	37	40	45	47	50	55	56	59	63	66	76	83	89	98	109	116
IRELAND	...	...	...	...	...	...	...	...	...	...	...	...	...	...	101	105
NORWAY	...	...	...	...	...	...	...	...	...	...	...	...	...	...	105	112
UNITED-KINGDOM	51	54	54	56	59	63	69	75	78	80	85	90	96	101	105	
SWEDEN	46	48	51	55	59	63	68	70	75	79	86	93	100	111	123	131
SPAIN	29	31	33	34	35	35	38	40	44	49	49	54	58	62	62	67
GREECE	22	23	23	24	25	27	28	28	33	36	38	42	53	70	90	112
ITALY	59	59	58	58	56	57	58	60	62	65	69	75	81	89	95	111
PORTUGAL	20	22	21	22	22	24	25	27	29	31	34	37	40	45	49	52
TURKEY	12	12	12	11	13	17	18	19	21	24	29	31	32	34	36	42
YUGOSLAVIA	35	33	32	33	41	39	41	47	56	62	86	100	104	109	115	136
CANADA	75	77	77	78	82	89	97	106	123	132	144	170	181	204	217	237
UNITED-STATES	200	184	190	203	227	249	275	286	298	305	318	340	354	359	379	408
JAPAN	52	53	62	65	70	73	74	75	76	80	86	90	96	102	104	119

TABLE XIII - Total enrolment ratios (1950-1965)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY	595	584	574	574	564	555	553	536	533	526	525	537	557	571	583	602
AUSTRIA	553	564	560	563	560	558	559	559	556	558	562	561	559	561	569	588
BELGIUM	569	609	619	640	652	668	684	701	720	740	755	751	768	777	782	789
FRANCE	549	580	598	619	641	662	679	697	696	711	734	744	735	727	741	741
LUXEMBURG	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NETHERLANDS	653	660	665	678	695	709	713	723	735	737	738	733	728	722	722	724
SWITZERLAND	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
DENMARK	517	528	537	552	567	574	577	581	586	590	601	596	594	594	586	589
FINLAND	465	470	482	494	508	526	536	552	563	571	571	569	566	564	560	551
IRELAND	...	...	...	...	...	...	...	...	...	706	711	720	740	749	763	778
NORWAY	...	...	...	...	...	...	...	...	...	...	...	...	...	...	581	584
UNITED-KINGDOM	529	560	563	568	574	582	590	610	612	609	607	605	599	610	605	601
SWEDEN	435	455	474	488	503	514	522	526	528	533	537	537	537	541	542	542
SPAIN	321	328	336	348	366	373	387	397	403	411	416	426	435	442	445	461
GREECE	...	...	...	...	...	...	...	431	455	457	463	471	...	...	...	...
ITALY	432	428	436	445	445	468	478	485	492	499	499	520	529	545	557	577
PORTUGAL	238	249	277	292	299	309	316	322	328	343	356	365	374	381	393	398
TURKEY	192	191	194	199	209	220	233	242	252	260	289	310	324	334	338	345
YUGOSLAVIA	334	324	323	329	335	363	382	404	423	431	480	514	533	545	537	558
CANADA	564	579	590	607	620	633	642	653	666	678	690	703	712	723	731	736
UNITED-STATES	687	693	697	714	728	739	751	757	764	766	778	785	788	793	790	
JAPAN	553	563	552	554	571	586	595	600	605	613	623	626	622	621	623	

ANNEX II

STRUCTURE AND DEVELOPMENT OF SCHOOL SYSTEMS
IN O.E.C.D. COUNTRIES

Comparative analysis of the expansion of education on the basis of the statistics used in this study calls for as accurate a knowledge as possible of school systems in Member countries, and more particularly the structural changes that have occurred in these systems during the period concerned (1950-1965).

In interpreting the growth of enrolments it is necessary to take account of the relative prominence of each level and type of education in the various national systems, especially in regard to the duration of studies and the corresponding age-groups. Also, it is important to allow for the fact that the uniformity of statistical series is liable to be affected by changes introduced as a result of educational reforms in one country or another.

The present Annex starts with an analysis of compulsory schooling, after which the different levels of education from pre-primary to secondary are considered. Since higher education is the subject of a special study by the Secretariat, it will not be dealt with here.

1. Compulsory schooling

The existence of legislation making it compulsory for children to acquire a basic education through attending school over a given period means that everyone in certain age-groups should be enrolled at an educational establishment. Within these age limits, therefore, the growth of enrolments in theory depends solely on demographic factors. However, apart from the fact that total participation has not yet been achieved in practice in a number of countries, the education received is not always the same, given that there may be some diversification of studies before the end of compulsory schooling.

In 1950 the period of compulsory school attendance in O.E.C.D. Member countries ranged from a maximum of ten years to a minimum of three. In most countries it was eight years: namely in Belgium, Finland, France, Germany (1), Iceland, Ireland, Italy, Luxembourg, Netherlands, United States and

(1) In Germany, apart from eight to nine years' compulsory attendance at a full-time educational establishment, pupils are subsequently required to take part-time courses in a vocational school (Berufsschule) until the age of 18 unless enrolled at some other type of school.

in parts of Norway and Sweden. It was ten years in the United Kingdom; nine years in Japan and in certain states, provinces and cantons of the United States, Canada and Switzerland; seven years in other parts of Canada and Switzerland and in Denmark, Norway, Sweden and Yugoslavia; six years in Greece and Spain, five years in Turkey and three years in Portugal.

Age of entry was six or seven years (1), several countries admitting children at either age. Since the school-leaving age has been set at 14 years in the vast majority of developed European countries and at 15 years in a small number of others, it can be seen that for a proportion of students at any rate compulsory schooling extended into the secondary stage. However, for other students compulsory schooling ended at primary level, which meant that there was already some measure of discrimination. Lastly, in the less developed countries, like the Mediterranean nations, compulsory schooling coincided exactly with the period of primary education. The normal school-leaving age was still 11 years (Greece and Spain) and even 10 or 9 years (Turkey and Portugal), although in cases where pupils had schooling to make up, compulsory attendance could be extended for a few years (up to the age of 12 in Portugal and 13 in Turkey).

During the period covered by the study some changes took place in a number of countries, especially from 1960 onwards. Other reforms, either in preparation or already approved, had yet to be put into effect. In most Member countries, however, no significant changes occurred, which explains the uniformity of the statistical series for the educational levels covered by compulsory schooling in each country.

There is seen to have been an increase in compulsory education in all the Mediterranean countries. In Spain the school-leaving age was raised from 11 to 13 years in 1964, making the period of compulsory schooling eight years in all. In Greece the school-leaving age was raised to 14 years also in 1964, thus increasing compulsory school attendance from six to nine years. In Turkey a reform is under way which will gradually increase the period of compulsory attendance to eight years. In Portugal compulsory education was increased to four years in 1956, with the introduction on an experimental basis of fifth and sixth year primary classes as from 1968/69. In Yugoslavia, the period of compulsory schooling has been increased from seven to eight years, so that the school-leaving age is now 14 years.

(1) Except in the United Kingdom, where the age of entry is five years.

This raising of the school-leaving age has meant by and large that compulsory schooling extends into secondary education. In some cases, in fact, pupils completing their basic primary education are offered a choice between a further primary course and the lower secondary course. Thus, in Spain, a pupil who has completed his enseñanza elemental may either go on to enseñanza media or continue in primary school until the age of 13. In Greece provision has been made for pupils to move on from the elementary school to the gymnasium. In Yugoslavia, on the other hand, the entire eight-year compulsory course is primary, secondary education beginning in theory at the age of 15 (although in fact the second cycle of primary education - from 11 to 14 years of age - may be equated with the lower secondary cycle).

The most significant reform to have taken place in Member countries, namely in Sweden, has been the introduction of a comprehensive school (Grundskola), providing nine years of complete compulsory education. This reform, which had been progressively implemented since 1962, became fully operative as from 1968/69. The school covers three levels of education ranging from the erstwhile primary course to the lower cycle of secondary education.

In the other countries, the most notable extension of compulsory schooling took place in certain states of the U.S.A., where it now lasts 12 years, while in other states it still only lasts eight. In the European countries the changes have been minor ones: in Austria the period of compulsory education was increased from eight to nine years, as it also was in Luxembourg. However, plans to prolong compulsory attendance have been put in hand in certain countries, notably France, where the period was set at 10 years as from 1967.

It would be a mistake to regard legally compulsory schooling as synonymous with 100 per cent attendance: in a number of countries it is more a question of a trend than of a reality. As already pointed out in the study of the development of secondary education (1), there are noticeable instances, especially in the Mediterranean countries, in which compulsory schooling legislation is not fully implemented, the main causes being absenteeism and drop-outs (permanent or temporary) in rural areas where school-age labour continues to be frequently used.

2. Pre-primary education

Pre-primary education, which in its various forms exists in all Member countries of the O.E.C.D., is playing an increasingly important part in preparing children for school

(1) See Development of Secondary Education: Trends and Implications, O.E.C.D., 1969, Chapter II.

life. It is tending to become more and more widespread, although in some countries there are still not enough schools to meet the growing social demand. Furthermore, the function fulfilled by pre-primary schools is not always an initiation to school life; much of the time the schools serve simply as nurseries. Yet even allowing for cases where this is so, the expansion of pre-primary education helps to promote the implementation of compulsory school attendance, in that there is less tendency than before to keep school-age children at home, sometimes for the purpose of looking after other children (an important cause of absenteeism in the less developed countries). At the same time, mothers are free to go out to work and the active population is thereby increased.

But it is basically from the teaching standpoint that these schools are of special interest; the introduction of new methods is more common there, and this at the same time encourages their use in primary education.

Pre-primary education in the various Member countries lasts from two to four years, depending on the age of entry, which ranges from two to five, and the lower age limit for compulsory schooling, which as has been seen is set at six or seven years (except in the United Kingdom, where it is five). In eleven countries (1), pre-primary education extends over three years, whereas in seven others (2) it lasts four years and in five (3) only two years.

Some countries authorise different ages of entry and transfer to primary education depending on the maturity of pupils. In the Netherlands, for example, children may stay on at a pre-primary school until the age of eight, provided that a certificate is issued stating that at the age of seven the child is not yet ready to enter a primary class.

Pre-primary schooling may in some cases be spread over more than one type of establishment. Thus, in Canada the child moves on from the nursery schools (three and four year olds) to kindergartens (five and six year olds). In Spain there are escuelas maternales (two and three year olds) and escuelas de parvulos (four and five year olds). In Turkey the nursery schools cater for children of two and three years of age and the kindergartens for four and five year olds.

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- (1) Austria, Belgium, Canada, Finland, Germany, Italy, Japan, Netherlands, United Kingdom, United States, Switzerland.
 - (2) Denmark, France, Norway, Spain, Sweden, Turkey, Yugoslavia.
 - (3) Greece, Iceland, Ireland, Luxembourg, Portugal.

The types of establishment in question may differ very considerably depending on whether they are nurseries or real pre-primary schools. In some cases too, they use different teaching methods or are organised by different authorities. In nearly all countries, these authorities are both public (the state or local authorities) and private (trade associations, religious denominations or merely private persons). In some cases the state subsidises the private establishments, their operation being almost invariably subject to official authorisation and supervision. Also, in view of the fact that these establishments are performing a real social service they are responsible, in some countries, not only to the Ministry of Education but also to the Ministry of Social Affairs (Denmark, Finland, Norway and Sweden).

The structure, duration and age limits of pre-primary education underwent no significant changes during the period covered by the study.

3. Primary education

Primary education's place in the school systems of Member countries differs appreciably, which makes inter-country comparisons difficult. For one thing, its duration varies considerably, and for another, the age limits and especially the age at which pupils move on to secondary education are not the same everywhere. Lastly, specifically national schemes have been developed for the internal organisation of study cycles, particularly the terminal cycle, which underwent some changes during the period in question.

(a) Duration of primary education

In 1950 the duration of primary education ranged from four to eight years, virtually the same difference remaining at the end of the period covered by the study. However, a distinction must be made between the duration of elementary education, which represents the primary course in the true sense, and that of the continuation course, which is usually intended for pupils completing their compulsory education but not taking secondary studies. In the statistics given in Annex I, enrolments in continuation courses have, wherever possible, been assimilated with enrolments in secondary education.

(b) Study cycles in primary education

Primary education is not always a single study cycle representing one portion of the educational system. In many countries it comprises several cycles, with not only a break between the elementary and continuation courses but in some cases within the elementary course itself.

In this regard, Member countries can be divided into three main groups:

- those in which primary education comprises a single course;
- those in which it comprises an elementary course and a continuation course; and
- those in which the elementary course is divided into more than one cycle with, if need be, a continuation course as well.

The first of these groups comprises Japan, Greece, Scotland and Northern Ireland. There the studies are continuous and form the common course of the primary schools, entry to secondary schools taking place when the pupil has completed his full primary education.

The next group consists of 10 Member countries: Austria, Denmark, France, Finland, Germany, Ireland, Netherlands, Norway, Spain and Yugoslavia. In all those countries elementary education is supplemented by an upper primary or continuation course, as the case may be, for pupils who at the end of the lower primary course do not go on to a secondary school. This, as we have already seen, introduces a dichotomy into the educational system even before the end of primary education, the result of which is that pupils are trained to different standards during the period of compulsory schooling.

The third group, which in some cases may bear a similarity to the previous one, depending on whether or not the primary system provides for a continuation course, comprises those countries in which there is a sequence of primary education cycles. The countries belonging to this group are Belgium, Luxembourg and certain states of the U.S.A. with three cycles, and Iceland, Italy, Portugal, Sweden, England and Wales, and Canada with two. Each cycle lasts either two or three years.

(c) Adult primary education

In some Member countries where there is still a relatively high rate of illiteracy, efforts are being made to check this trend by means of primary education for adults. Thus, in the Mediterranean countries one finds in addition to the normal primary schools educational centres where adults are taught to read and write. These centres may be either public or private establishments, and classes generally take place in the evening. There are also schools for the armed forces (Portugal and Turkey), where recruits are given basic training during the period of their

compulsory military service. Adult primary education is sometimes supplemented by vocational training. This type of education should not be confused with the complementary education for adults provided in a number of countries. The statistical tables in Annex I do not cover these courses for adults.

4. Secondary education

In nearly all Member countries the transition to secondary education brings the first diversification of study courses. Secondary schooling offers a wide variety of courses, which may be grouped in three main categories:

- general education;
- technical and vocational education; and
- teacher training.

The first two types can be further divided into the long secondary course leading to higher education (called type a in the O.E.C.D. classification) and the short secondary course (type b) for pupils proposing to acquire a general or vocational education at intermediate level, usually with a diploma at the end of the course that will serve as direct qualification for a job.

In the initial stages of compiling the figures that form the statistics used in the present study, allowance was made wherever possible for this diversity of types of secondary education. The distinction between the three main categories (general, technical and vocational, teacher training) was relatively easy to establish. Between the long and short courses it is much more vague, however, since the channels of transition from one to the other are not always clearly defined. This is a question which turns on the relative rigidity of the various school systems and will be discussed later on.

It is proposed first of all to consider access to secondary education and then to analyse each type of course.

(a) Access to secondary education

The normal age of entry to secondary schools ranges from 10 to 14 years (1), depending on how long the common elementary cycle of primary education lasts. From a comparative standpoint, it may therefore be said that the distinction between primary and secondary education in the 10 to 14 age group is only very relative,

(1) Following the 1962 reform, the Swedish comprehensive school provides education up to the age of 15 years, after which the pupils may go on to secondary schools. However, the upper cycle of the comprehensive school, for 13 to 15 year olds, may be regarded as equivalent to the first cycle of secondary education.

especially as in every country where pupils may start on the first cycle of secondary education at an earlier age alternative provision is made, as we have seen earlier, for a continuation course at primary level.

In most Member countries, pupils start their secondary education at 11 or 12 years of age. The exceptions among the European countries are Austria, Germany and Spain, where the changeover normally takes place at the age of 10, and Norway, part of Switzerland and Denmark, where it occurs at 13 or 14. Sweden has already been noted as a special case in that the comprehensive school caters for children up to the age of 15. In some parts of Canada children may go over to secondary education at the age of 13, while in some states of the U.S.A. the age of entry is 14 years.

No major reforms were introduced in this area between 1950 and 1965, other than in some of the Scandinavian countries (Sweden and Denmark) where there was a tendency to raise the age of entry to secondary schools.

(b) General secondary education - long course ('type a')

The training given on this type of course corresponds to what is commonly called a general education (literary and scientific), the diploma awarded on completion of the course being the prerequisite for entry to an establishment of higher education. Conventionally, therefore, these courses form the backbone of secondary education, linked as they are to the national traditions of each country. Hence the diversity of schools offering these courses in Member countries. This diversity relates to the duration of studies as well as the nature of the establishments concerned and curriculum structure. It is now proposed to consider each of these differing aspects in turn.

As already noted, the standard age of entry to secondary schools ranges from 10 to 14 years but in most countries is set at 11 or 12 years. The normal school-leaving age is 17 or 18 years in nearly every country, with the exception of Spain (15 years), Turkey (16 years) and Iceland (20 years). Within these age limits the duration of studies not only varies but relates to different age-groups, which makes inter-country comparisons difficult.

The most usual duration of studies is either six or seven years, not only in most European countries but also in the United States, Canada and Japan. Some of these countries allow a shorter duration of studies, however: in the Netherlands and Canada secondary education may be reduced to 5 years. In other countries

the studies last longer: eight years in Finland and Italy and up to nine years in Austria and Germany.

There are cases in which the formal distinction between primary and secondary education does not coincide with the actual place occupied by the relevant establishments in the educational system. In Yugoslavia, according to the national classification, general secondary education does not begin until the age of 15, with the result that its duration is limited to four years; but in fact the upper primary cycle (11-14 years) may be regarded as a lower secondary cycle. For purposes of inter-country comparison, therefore, enrolments in the latter category should be aggregated with total enrolments in secondary education. Unfortunately, with the statistics that were available it was not possible to do this here.

In Sweden, following the introduction of the comprehensive school the upper-level course of the Grundskola (13-15 year olds) corresponds to the first cycle of secondary education. Thus, what counts is not the official nomenclature of establishments but the type and content of the education they provide.

Some countries provide a uniform type of long secondary course, others do not: in some cases diversification occurs in the terminal cycle when, after an initial common course, pupils begin to specialise in preparation for higher education. In most Member countries secondary education is divided into two cycles, the first of these sometimes being an orientation course. However, some Member countries introduced reforms during the period under consideration, and these have to be taken into account in order to understand how the system functions during the transition phase when old and new structures exist side by side and to interpret the relevant statistics.

The most radical reforms were those introduced in Denmark (1958), Norway (1959) and Sweden (1962).

In Denmark the mellemskola (intermediate lower secondary school) was abolished; this brought the age of transfer to secondary education up to 14, thereby reducing the length of the general secondary course by two years.

In Norway, on the other hand, the age of admission to secondary education was lowered from 14 to 13 years through the introduction of a first cycle, the duration of secondary education being increased from 5 to 6 years.

The Swedish reform replaced the realskola (intermediate lower secondary school) with the upper course of the comprehensive school, the second cycle being covered by the gymnasium. The duration of general secondary education is still unchanged, therefore, but its structure is different.

It should also be noted that in Italy the scuola media (intermediate lower secondary school) was opened up in 1963 to all children in the 11-13 age-group as the first cycle of secondary education.

In all the other Member countries there was no appreciable change in the structure of general secondary education. Consequently, the statistical series used in order to study the development of secondary education are largely uniform over time.

Although the diversity of establishments and training precludes pertinent and significant country-to-country comparisons in some cases, a common function can at least be discerned: namely preparation for higher education substantiated by a certificate of general secondary studies.

It should be remembered, however, that in some countries this certificate is but one of the prerequisites for admission to a university, an entrance examination being prescribed as well. Also, for admission to a non-university establishment of higher education other diplomas, attesting to technical or vocational training, are sometimes required.

(c) General secondary education - short course (type b)

In addition to secondary education leading to university entrance, there are courses for pupils whose formal education will end either at the end of the compulsory schooling period or at secondary level. As noted earlier, there is the upper primary course (or primary continuation course), which can in fact be regarded as the first cycle of secondary education. Then there are establishments where the courses lead to a diploma giving access to jobs for which a general qualification above primary level is required. Normally, these types of establishment also offer courses that lead to further education in that they give privileged access to technical and vocational training, but in addition some of them enable their pupils to go on to the second cycle of general education, thereby making the distinction between long- and short-course education difficult: this is in fact only one of the forms which the first cycle of secondary education may take. For the purposes of this study, only the education provided by

short-course establishments will be considered, as opposed to that which forms the first cycle of the long course. It should be pointed out, however, that a diploma is very often awarded at the end of the first cycle.

The duration of studies in short-course establishments is in many cases the same as that of the first cycle of the long course, especially when there are parallel long-course schools to which pupils may transfer. But it can differ, notably in the case of upper primary schools. The most usual period is three or four years but it may be as long as six years (United Kingdom and Germany) or as short as two years or even one.

There are a few countries in which no differentiation is made between the long and short courses. For instance, in some Mediterranean countries (Spain, Greece, Portugal and Yugoslavia) the educational system does not include general secondary schools for pupils not intending to go on to higher education, while in the United States and Canada the various types of educational establishment are not differentiated in the same way as they are in Europe.

As regards the outlets of the general short course, several possibilities exist. In a number of countries pupils have the choice of either transferring to the long general course (upper cycle) or going on to technical and vocational establishments. In other countries technical and vocational training is the only outlet, although this may lead to higher education (generally non-university).

(d) Technical and vocational education

The organisation of technical education everywhere is more complex than that of general education, which makes inter-country comparisons even more difficult. The primary cause of this complexity is the highly varied content of technical and vocational education, which by its very nature necessitates many different branches of study. Another factor is the existence of several organisational authorities: in addition to the ministry of education, other administrative bodies are often involved, given that they are more directly concerned with vocational training in one or other sector of the economy.

The first distinction to be made here should be between establishments of technical education and establishments of vocational education. Not only do they teach different subjects but they teach them to a different standard: there is little in common, for instance,

between courses for skilled workers and training of middle-level technical executives. But quite apart from the fact that hybrid establishments exist in some cases, the line of demarcation is not always easy to draw.

The differentiation between secondary and higher education also raises particular difficulties. Certain establishments considered to be of secondary or intermediate level by the national authorities in fact come within the framework of non-university higher education, according to the O.E.C.D. classification.

It is also possible to distinguish between long- and short-course education, according to probability of access to higher education.

Lastly, there are a large number of part-time technical and vocational establishments.

Because this branch of education is so diverse, it did not seem possible to make a detailed study of it here. In some countries students may take up technical and vocational courses immediately after completing their lower primary education; in others the changeover takes place at a more advanced stage of the curriculum.

In most school systems it is possible for students to transfer from a general secondary course to technical and vocational training, especially at the break between the first and second cycles. In some countries there is even a preparatory cycle common to both types of education; in others, however, the early partitioning of studies into parallel courses is more constraining and rigid.

For the purposes of the present survey, enrolments in technical and vocational education were grouped in a single category after as detailed a study as possible of the establishments concerned. Because of the foregoing considerations, particular care must be taken to avoid any outright comparison of trends in this type of education in Member countries.

5. Teacher training

Training of primary and pre-primary teachers is given by specialised teaching establishments whose status, length of curriculum and organisation differ according to the countries concerned.

Although most teacher training establishments belong to the secondary school system, there are some countries in which the same studies form part of higher education e.g. in Germany,

Japan, the United Kingdom and the United States. Generally speaking, teacher training follows on from the upper secondary cycle, a school-leaving certificate being required in many cases. But teacher training schools may themselves also provide general education for their pupils. Thus, in some countries, two possibilities exist: either the student already holds a secondary school-leaving certificate and simply takes a teacher training course, or he has first of all to complete his general studies before receiving his specialised training. In some countries, pre-primary teachers are trained in special establishments. In others, they receive their training along with primary teachers.

The length of the teacher training course in most countries is three or four years (including general education in the majority of cases). In a few countries it is only two years (Portugal and Luxembourg), while in certain others it is as much as five (Netherlands, Switzerland and Ireland). Care must be taken, however, to avoid any hasty comparison of training durations owing to the abovementioned disparity of structures.

The age-groups covered by teacher training are not the same in every country. In some the course coincides with the upper secondary cycle, while in others it corresponds to the first few years of higher education.

Training of secondary school teachers is not dealt with here, since this comes under the heading of higher education.

6. Complementary education

In a number of north European countries one finds, alongside the ordinary schools, establishments providing continuation courses either for young people or for adults who have not taken their studies beyond the period of compulsory schooling.

Cases in point are the Folkehøjskoler (colleges for adults) and Andre ungdomskoler (schools for young people) in Denmark; the Kansanopisto (people's university) and the Työväenopisto (civic institute for workers) in Finland; the Folkehøgskoler (schools for adults and young persons) in Norway; the Folkhögskolor (adult colleges) in Sweden; and the Skole za dopunsko obrazovanje (schools of further education) in Yugoslavia.

Enrolments in these establishments are not included in the tables in Annex I.

7. Special education

In all Member countries special education is provided for maladjusted, backward or handicapped children. Wherever

possible, the relevant statistics have been isolated.

This type of education may be given in separate establishments or in special classes provided by ordinary schools. In some countries both procedures are used. Generally speaking, schools or classes are differentiated according to the type of disability suffered by the child. The structure and curriculum of the courses are in some cases patterned on those of the ordinary school system, but may be adjusted to a greater or lesser degree. The duration of attendance, in particular, does not always coincide with that of compulsory education, since in a number of cases the upper age limit is exceeded: thus, in the United Kingdom attendance may continue until the age of 17 or 18 and in Finland up to 16 in some schools.

These special courses are not solely confined to primary education, moreover. In some countries they extend to secondary level also. They may be both general and vocational, manual work even being a preferred means of rehabilitation. Consequently, some special schools are independent of the educational system, being responsible to institutions of social rehabilitation.

ANNEX III

EXTRAPOLATION OF ENROLMENTS UP TO 1980

The following extrapolations concern enrolments at each of the three levels of education up to 1980. They cover all 23 O.E.C.D. countries apart from Iceland and Switzerland whose basic data were too incomplete.

1. Stages of the calculation

The successive stages of the calculation are as follows:

E1- Extrapolation of the enrolment ratio at 1st level,
 w , defined as follows:

$$w(t) = 1000 \times \frac{\text{1st level enrolments in year } t}{\text{population aged 5 to 14 in year } t}$$

E2- Extrapolation of ratio R_{21} defined as follows:

$$R_{21}(t) = 1000 \times \frac{\text{2nd level enrolments in year } t}{\text{1st level enrolments in year } t-5}$$

E3- Extrapolation of ratio R_{32} defined as follows:

$$R_{32}(t) = \frac{\text{3rd level enrolments in year } t}{\text{2nd level enrolments in year } t-5}$$

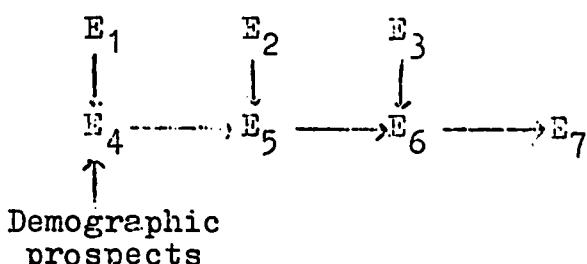
E4- Calculation of 1st level enrolments by multiplying the numbers in the 5-14 age-group, which are also known through ratio w , extrapolated in E1;

E5- Calculation of 2nd level enrolments by multiplying 1st level enrolments extrapolated in E4 by ratio R_{21} extrapolated in E2;

E6- Calculation of 3rd level enrolments by multiplying 2nd level enrolments extrapolated in E5 by ratio R_{32} extrapolated in E3;

E7- Calculation of total enrolments.

In short, the sequence of calculations is as follows:



Ratio $\psi(t)$ is given in Table IX of Annex I and ratios $R_{21}(t)$ and $R_{32}(t)$ are in Tables I and II which follow; these data are also used in country Graphs I to XX.

2. Adjustments of ψ , R_{21} and R_{32}

When extrapolating a trend by the least squares method, it is essential that the adjusted curve follow the data observed as closely as possible otherwise the extrapolation loses all significance. But a glance at Graphs I to XX shows that in many cases an adjustment covering the entire period would have necessitated choosing a complicated function. Unfortunately, such functions are usually unsuitable for extrapolation as they lead, if the horizon is too distant, to such great confidence intervals that they lose nearly all practical meaning. Moreover, these functions do not always lend themselves to simple theoretical interpretation.

We have therefore confined ourselves in all cases to a linear adjustment in the form:

$$\psi(t) = a_0 + a_1 t$$

$$R_{21}(t) = b_0 + b_1 t$$

$$R_{32}(t) = c_0 + c_1 t$$

t being the time in years ($t = 1$ for the 1st observation used in the adjustment).

However, it was necessary to check that the linear model adopted fell in line with the observations. Thus, in this case the sequence of residuals between values observed and theoretical values has to be distributed haphazardly around the trend. This assumption may be tested by calculating Von Neumann's ratio:

$$\frac{n}{n-1} \frac{\sum \overline{u(t+1)} - u(t)^2}{\sum \overline{u(t)}^2}$$

where n is the number of observations and $u(t)$ the residual. This ratio has been tabulated by Hart for confidence levels of 95 per cent and 99 per cent.

We have finally selected for each ratio the maximum number of successive observations compatible with a haphazard distribution of residuals (at the level of 99 percent), where necessary discarding the oldest observations. The period of adjustment retained is shown in Table III as well as the parameters of the equations, the standard deviation of residuals σ_u , as well as this same standard deviation as a percentage of the average value of the adjusted variable. This latter quantity enables the accuracy of the various adjustments to be compared rapidly.

3. Extrapolations of W, R₂₁ and R₃₂

For year T, the extrapolated trend of W (for example) is given by:

$$W(T) = a_0 + a_1 T$$

and this estimate falls between a maximum value and a minimum value given by the expression:

$$W = (a_0 + a_1 T) \pm k \sigma_u \sqrt{\frac{1}{n} + \frac{(T - \bar{T})^2}{\sum (t - \bar{T})^2}}$$

k being a factor read in Student's table for a particular number of observations and confidence levels (we have chosen 98 per cent).

The confidence interval is therefore all the greater and the estimate of the trend is therefore all the less precise when:

- the standard deviation of residuals σ_u is greater;
- the number of observations n is smaller.

This explains the very wide intervals which may be observed on certain country graphs (Greece, Japan, the United Kingdom and Yugoslavia).

The value found for the trend and the interval on either side are shown in Table IV.

4. Demographic projections

The demographic prospects for 1970, 1975 and 1980 will be found in Table V. The sources used and indicated at the end of the table often gave different figures for 1965 from our own, but we have retained the latter for the sake of coherence in our own calculations. This explains why for certain countries the difference between the numbers in a particular age-group in 1965 and the numbers in the same age-group five years later in 1970 is a little too great. However, this has little importance for 1980.

Table VI shows the increase in a few age-groups between 1950 and 1965 and between 1965 and 1980.

5. Enrolments in 1980

Enrolments are calculated on the basis of the extrapolation of ratios and demographic prospects. A calculation example concerning the Netherlands is given in Table VII and the results for each country in Table VIII (1).

Table IX shows the deviation between the minimum and maximum estimates expressed as a percentage of the minimum estimate. The deviation increases from primary education to higher education since the deviation for each level of study combines with that for the preceding levels of study. These deviations are all the wider when the number of observations used for the adjustment is smaller and when the standard deviation of residuals is greater. For some countries, they are very great and the following remarks are called for in this connection:

- (a) In primary education, it would no doubt be possible to obtain more precise estimates by taking the age-groups corresponding to compulsory school attendance. However, it will be recalled that our calculations do not allow for the uncertainty inherent in demographic projections, which is fairly great precisely for the age-group concerned.
- (b) From the strict point of view of statistical accuracy, there is no justification in extrapolating 15 years ahead, series as short as those in our possession. However, considering the existing data, no other method appears to be better and greater detail would certainly have been misleading.

Lastly, Table X shows the enrolment ratios in 1950, 1965 and 1980.

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- (1) These figures do not include various types of education not classified by level which account for a negligible proportion of the total.

For Denmark, changes in the educational structure prevent \bar{w} and R_{21} from being calculated separately. We have therefore directly extrapolated the primary plus secondary education index, whose value is:- 1970 : 750 ± 13 ; 1975 : 766 ± 18 and 1980 : 782 ± 24 . We have also extrapolated the ratio between higher education enrolments and primary plus secondary education five years previously, i.e: 1970 : 170 ± 4 ; 1975 : 202 ± 5 and 1980 : 234 ± 7 .

For Norway, we have assumed that non-university higher education enrolments accounted for 50 per cent of university enrolments, i.e. the proportion observed in the last few years for which figures are available.

TABLE I - Ratio R₂₁ (1955-1965)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY	572	610	618	607	622	612	620	643	663	680	692
AUSTRIA	299	312	321	324	328	329	342	353	365	363	355
BELGIUM	402	386	396	412	433	442	444	471	479	479	485
CANADA	237	245	256	264	269	283	308	325	338	348	353
SPAIN	175	188	195	194	197	208	233	250	271	295	327
UNITED STATES	337	345	353	355	351	352	368	384	394	395	399
FINLAND	360	384	405	431	451	460	481	499	517	531	554
FRANCE	285	284	303	320	337	349	373	403	417	431	452
GREECE	...	242	288	302	320	334	...	...	...	...	...
IRELAND	361	350	338	355	367	370	384	402	407	422	439
ITALY	271	288	307	329	355	374	403	429	467	505	541
JAPAN	742	743	748	704	679	709	757	779	767	799	829
LUXEMBOURG	302	305	311	307	324	298	308	332	322	324	330
NORWAY	375	383	393	420	444	466	472	491	510	540	577
NETHERLANDS	455	473	487	512	532	551	566	589	570	587	606
PORTUGAL	192	201	200	213	238	250	280	303	323	339	353
UNITED KINGDOM	517	521	530	571	596	617	623	609	639	657	674
SWEDEN	335	345	344	350	361	367	369	374	365	374	335
TURKEY	149	170	191	207	222	239	244	250	248	244	255
YUGOSLAVIA	141	154	160	167	174	174	195	193	207	221	222

Source : based on Table VIII of Annex I.

TABLE II - Ratio R₃₂ (1955-1965)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
GERMANY	67	70	74	78	75	80	88	99	105	113	122
AUSTRIA	112	118	131	137	135	140	157	159	166	173	182
BELGIUM	105	111	118	123	128	134	140	149	148	157	160
CANADA	252	277	300	333	340	345	357	367	397	399	413
SPAIN	244	252	250	253	246	225	215	219	233	235	237
UNITED STATES	417	447	457	459	458	464	470	474	486	520	552
FINLAND	137	131	130	131	133	134	141	142	140	141	150
FRANCE	196	197	199	203	205	199	212	216	222	223	233
GREECE	...	...	...	...	...	...	...	...	...	...	...
IRELAND	...	...	...	...	...	74	77	81	88	90	93
ITALY	200	195	175	176	180	189	194	195	197	195	195
JAPAN	94	85	87	95	82	84	89	97	111	117	119
NORWAY (a)	62	50	62	69	71	79	85	89	92	95	99
NETHERLANDS	103	107	112	117	121	121	127	127	129	120	121
PORTUGAL	206	211	215	213	214	203	199	197	194	173	166
UNITED KINGDOM	97	103	111	115	115	121	125	125	127	124	127
SWEDEN	159	165	167	173	183	185	186	196	217	239	250
TURKEY	259	272	262	260	277	250	230	220	206	202	202
YUGOSLAVIA	253	229	345	400	420	540	564	550	521	512	510

Note: (a) University education only.

Source: based on Table VII of Annex I.
for Norway, see Table VI of Annex I.

TABLE III - Result of the adjustments

	U				R ₂₁				R ₃₂					
	Period	b ₀	b ₁	σ _b	Period	b ₀	b ₁	σ _b	Period	c ₀	c ₁	σ _c	σ _c /R ₃₂	
GERMANY	1953-65	678,593	0,054	2,44	1,4	1955-65	571,636	* 9,964	14,49	2,3	1957-65	61,278	* 4,300	4,90
AUSTRIA	1952-65	764,615	* 4,769	11,99	1,5	1955-65	295,200	* 6,709	4,69	1,4	1955-65	105,727	* 6,692	3,59
BELGIUM	1957-65	929,111	* 4,067	6,63	0,7	1955-65	375,455	* 10,591	9,67	2,2	1955-65	101,236	* 5,355	2,36
CANADA	1950-65	881,675	* 1,272	6,99	0,8	1956-65	226,267	* 13,206	6,52	2,2	1955-65	257,418	* 14,236	8,93
SPAIN	1956-65	626,467	0,605	3,24	0,5	1958-65	159,714	* 19,369	9,66	3,9	1955-65	251,036	- 2,309	11,31
U.S.A.	1955-65	916,291	1,209	7,54	0,8	1955-65	329,835	* 5,982	7,74	2,1	1955-65	410,855	* 10,414	17,91
FINLAND	1955-65	705,891	* 5,400	5,20	0,8	1955-65	348,818	* 18,727	5,01	1,1	1955-65	128,273	* 1,500	3,74
FRANCE	1950-65	1026,825	* 7,781	27,27	2,8	1955-65	292,164	* 17,882	7,42	2,1	1955-65	188,109	* 3,573	4,55
GREECE	1950-65	706,590	- 1,251	18,93	2,7	1956-60	232,400	* 21,600	10,80	3,6	1954-65	92,000	* 20,800	7,04
IRELAND	1955-65	860,932	0,291	3,68	0,4	1955-65	327,036	* 9,055	12,13	3,2	1959-65	71,571	* 3,211	1,55
ITALY	1958-65	699,750	0,083	14,71	2,1	1958-65	289,357	* 30,226	8,60	2,0	1955-65	195,364	0,273	7,92
JAPAN	1955-65	679,067	- 5,501	27,01	4,2	1955-65	693,000	10,400	33,23	1,4	1958-65	70,929	* 5,988	5,59
LUXEMBOURG	1950-65	851,775	0,526	19,72	2,3	1955-65	299,392	* 2,573	9,75	2,9	1955-65	195,364	0,273	7,92
NORWAY (a)	1954-65	738,076	* 5,294	8,47	1,2	1955-65	313,354	* 19,500	10,58	2,3	1955-65	53,500	* 4,210	2,63
NETHERLANDS	1958-65	803,929	1,148	12,57	1,6	1957-65	487,083	* 13,250	9,87	1,7	1957-65	115,196	0,850	2,61
PORTUGAL	1953-65	500,470	1,558	11,01	2,1	1956-65	167,447	* 18,824	7,53	2,8	1956-65	228,400	* 5,761	6,13
UNITED KINGDOM	1957-65	657,889	- 0,657	19,45	3,0	1955-55	110,4873	* 15,091	13,79	2,3	1955-65	100,000	* 2,635	3,53
SWEDEN	1956-65	657,400	* 15,691	10,03	1,3	1958-65	366,929	- 1,579	12,61	3,5	1950-55	113,577	* 13,095	9,15
TURKEY	1956-65	334,533	* 14,121	13,07	3,2	1958-65	212,964	* 5,702	8,97	3,7	1955-65	203,801	- 7,036	13,55
YUGOSLAVIA	1950-65	539,575	* 16,249	20,02	3,0	1955-55	133,900	* 7,973	4,53	2,5	1959-65	110,035	13,798	5,44
													10,7	

(a) For ratio R₃₂, university only.

• Significantly different from C₀ for a confidence level of 98%.

TABLE IV - Extrapolated value of ratios W, R₂₁, R₃₂, in 1970, 1975, 1980

	W				R ₂₁				R ₃₂			
	1970	1975	1980		1970	1975	1980		1970	1975	1980	
GERMANY	680 ± 21	680 ± 30	680 ± 38		729 ± 41	779 ± 60	P29 ± 70		149 ± 10	181 ± 27	212 ± 36	
AUSTRIA	850 ± 28	874 ± 40	898 ± 52	404 ± 13	437 ± 19	471 ± 26	213 ± 10	246 ± 12	279 ± 20			
BELGIUM	986 ± 24	1006 ± 37	1027 ± 49	545 ± 27	598 ± 40	651 ± 53	197 ± 7	214 ± 10	240 ± 13			
CANADA	923 ± 13	933 ± 18	943 ± 23	424 ± 21	490 ± 31	556 ± 41	490 ± 25	563 ± 37	635 ± 49			
SPAIN	636 ± 10	639 ± 15	642 ± 20	412 ± 41	509 ± 64	605 ± 87	214 ± 32	203 ± 47	191 ± 62			
UNITED STATES	936 ± 22	942 ± 32	948 ± 43	426 ± 22	455 ± 32	485 ± 42	579 ± 51	630 ± 74	682 ± 98			
FINLAND	613 ± 15	584 ± 21	555 ± 28	648 ± 14	742 ± 21	836 ± 27	152 ± 11	160 ± 15	167 ± 20			
FRANCE	863 ± 52	825 ± 70	786 ± 89	530 ± 21	628 ± 31	717 ± 40	245 ± 13	253 ± 19	281 ± 25			
GREECE	678 ± 36	671 ± 49	665 ± 62	556 ± 107	654 ± 265	772 ± 342	300 ± 72	404 ± 122	508 ± 173			
IRELAND	856 ± 12	867 ± 17	869 ± 23	472 ± 34	517 ± 50	562 ± 65	110 ± 10	125 ± 13	142 ± 19			
ITALY	701 ± 63	701 ± 98	702 ± 133	682 ± 37	833 ± 57	985 ± 78	190 ± 22	191 ± 33	192 ± 43			
JAPAN	595 ± 85	567 ± 127	539 ± 170	649 ± 105	901 ± 157	953 ± 209	149 ± 21	179 ± 37	209 ± 51			
LUXEMBOURG	873 ± 37	875 ± 51	878 ± 64	341 ± 25	353 ± 36	356 ± 47	...	...	...
NORWAY (a)	648 ± 22	622 ± 31	595 ± 41	555 ± 30	753 ± 44	850 ± 50	121 ± 7	142 ± 11	163 ± 14			
NETHERLANDS	823 ± 54	831 ± 83	838 ± 114	673 ± 34	739 ± 52	805 ± 70	127 ± 10	131 ± 15	136 ± 20			
PORTUGAL	530 ± 24	538 ± 33	546 ± 43	450 ± 24	544 ± 35	638 ± 47	142 ± 19	113 ± 20	84 ± 30			
UNITED KINGDOM	549 ± 70	645 ± 107	642 ± 144	756 ± 39	936 ± 57	916 ± 75	142 ± 10	155 ± 15	169 ± 19			
SWEDEN	893 ± 32	971 ± 47	1050 ± 63	345 ± 54	337 ± 84	328 ± 114	314 ± 39	379 ± 61	415 ± 93			
TURKEY	546 ± 41	617 ± 52	688 ± 82	287 ± 38	316 ± 59	344 ± 90	175 ± 38	139 ± 56	101 ± 74			
YUGOSLAVIA	881 ± 38	962 ± 52	1043 ± 65	261 ± 13	301 ± 19	311 ± 25	619 ± 230	699 ± 357	757 ± 496			

(a) For ratio R₃₂, university only.

TABLE V - Demographic prospects (thousands)

(1)	1950	1965	1970	1975	1980	DENMARK (A1)	1950	1965	1970	1975	1980
GERMANY (A1)											
5-9	3718	4356	4808	4683	4449	5- 9	394	367	379	422	453
10-14	4461	3928	4258	4798	4572	10-14	315	372	367	378	422
15-19	3581	3668	3882	4245	4786	15-19	292	415	372	365	378
20-24	3685	4208	3470	3860	4220	20-24	296	376	421	370	365
Total	15446	16160	15418	17596	18127	Total	1297	1530	1539	1536	1618
AUSTRIA (A1)											
5-9	532	568	629	651	651	5- 9	2435	3103	2952	2969	3024
10-14	527	480	557	627	650	10-14	2326	2650	2975	2932	2947
15-19	446	499	476	555	625	15-19	2698	2522	2607	2827	2811
20-24	488	550	488	472	552	20-24	2672	2327	2473	2503	2701
Total	1993	2097	2150	2305	2478	Total	10121	10602	10907	11231	11493
UNITED STATES (A2)											
BELGIUM (B)											
5-9	542	761	779	705	654	5- 9	13201	20519	20921	22048	25215
10-14	570	714	771	792	707	10-14	11119	18956	20469	20870	22094
15-19	623	705	730	776	727	15-19	10515	17052	18940	20516	20915
20-24	656	556	734	710	786	20-24	11182	13667	17104	19057	20623
Total	2391	2736	3014	3003	2934	Total	145478	20194	23334	28497	30847
CANADA (B)											
5-9	1314	2214	2281	2143	2336	5- 9	377	410	391	392	399
10-14	1123	2040	2227	2296	2158	10-14	329	442	401	396	377
15-19	1077	1779	2055	2298	2307	15-19	312	499	430	397	383
20-24	1108	1377	1910	2101	2344	20-24	327	353	479	422	389
Total	4622	7410	8433	8838	9145	Total	1345	1694	1700	1597	1542

TABLE V - Demographic prospects (thousands) (contd.)

(2)	1950	1965	1970	1975	1980		1950	1965	1970	1975	1980
FRANCE (A1)	—	—	—	—	—	JAPAN (B)	—	—	—	—	—
5- 9	2127	3705	4092	4127	4420	5- 9	9522	7773	8087	8741	9504
10-14	2747	4112	4083	4077	4122	10-14	8700	9196	7032	9071	8725
15-19	3111	4292	4107	4075	4070	15-19	8568	1063	9158	7813	8053
20-24	3295	3013	3978	4093	4063	20-24	7726	9123	10203	9119	7788
Total	11580	15122	16250	16372	16675	Total	34516	37055	35980	33711	34070
GREECE (A2)	—	—	—	—	—	TUXEMBOURG (C)	—	—	—	—	—
5- 9	633	734	731	722	700	5- 9	19,4	25,0	27,0	30,0	33,0
10-14	744	713	724	722	717	10-14	17,5	23,6	25,0	27,0	30,0
15-19	792	727	698	711	714	15-19	20,1	21,2	24,0	25,0	27,0
20-24	720	587	712	678	699	20-24	25,7	22,5	22,0	24,0	25,0
Total	2889	2761	2865	2833	2830	Total	82,7	93,0	92,0	106,0	115,0
IRELAND (A2)	—	—	—	—	—	NORWAY (A1)	—	—	—	—	—
5- 9	268	281	304	322	364	5- 9	267	307	299	329	364
10-14	266	291	291	301	320	10-14	214	303	307	299	327
15-19	241	203	268	279	292	15-19	204	318	301	306	300
20-24	208	163	229	248	261	20-24	229	257	316	301	305
Total	983	938	1092	1150	1237	Total	914	1195	1223	1231	1296
ITALY (A2)	—	—	—	—	—	NETHERLANDS (A1)	—	—	—	—	—
5- 9	3755	4212	4477	4609	4750	5- 9	932	1150	1207	1343	1558
10-14	4204	4051	4095	4380	4562	10-14	925	1106	1145	1205	1311
15-19	4002	4218	3949	4040	4345	15-19	811	1182	1103	1113	1203
20-24	4071	3655	4151	3981	3993	20-24	900	908	1164	1100	1139
Total	16032	16146	16672	17010	17650	Total	3368	4346	4619	4791	5241

TABLE V - Demographic prospects (thousands) (contd.)

(3)	1950	1965	1970	1975	1980
PORTUGAL (A2)					
5- 9	798	989	922	997	1035
10-14	800	871	935	916	966
15-19	811	727	796	804	884
20-24	762	687	756	759	769
Total	3171	3174	3309	3456	3654
UNITED KINGDOM (A2)					
5- 9	3611	4114	4759	4990	5094
10-14	3348	3798	4144	4754	4985
15-19	3309	4282	3818	4145	4759
20-24	3560	3626	4327	3837	4164
Total	13828	15820	17048	17726	19002
SWEDEN (A2)					
5- 9	590	525	540	635	680
10-14	452	539	528	542	536
15-19	416	626	546	532	546
20-24	459	594	644	559	545
Total	1917	2284	2258	2268	2407
TURKEY (B)					
5- 9	2574	4628	4861	5203	6004
10-14	2355	3849	4508	4826	5173
15-19	2388	2919	3751	4472	4794
20-24	1963	2366	2856	3706	4420
Total	9290	13762	15976	18207	20399
YUGOSLAVIA (B)					
5- 9	1498	1863	1859	1901	2012
10-14	1754	1977	1908	1953	1895
15-19	1762	1652	1963	1900	1832
20-24	1584	1356	1721	1952	1889
Total	5598	6848	7451	7606	7629

Sources :

- A1 (excluding migration) and A2 (including migration)
cf. Demographic Trends in Western Europe and North America, 1965-1980, OECD, 1966. A2 prospects have been chosen.
- B : based on data communicated by the countries.
- C : Secretariat estimates.

TABLE VI - Compared Growth of some age-groups between 1950 and 1965
and between 1965 and 1980 (base year = 100)

	5 - T4	T0 - T9	5 - T9	20 - 24	5 - 24
	1965/50	1980/65	1965/50	1980/65	1965/50
GERMANY	T01	T10	T25	T16	T14
AUSTRIA	99	T24	T01	T03	T24
BELGIUM	T33	92	T19	T05	T26
CANADA	T75	T06	T74	T17	T72
DENMARK	T04	T19	T30	T02	T15
SPAIN	T21	T04	T03	T11	T06
UNITED STATES	T62	T20	T66	T19	T62
FINLAND	T21	91	T45	82	T32
FRANCE	T51	T09	T43	97	T46
GREECE	T05	98	94	99	T00
IRELAND	T07	T20	97	T24	T00
ITALY	T04	T13	T01	T08	T04
JAPAN	93	T07	T17	83	T04
LUXEMBOURG	T32	T30	T21	T26	T24
NORWAY	T27	T13	T49	T01	T35
NETHERLANDS	T28	T29	T40	T11	T34
PORTUGAL	T10	T14	99	T16	T03
UNITED KINGDOM	T14	T27	T21	T19	T22
SWEDEN	T02	T24	T34	T01	T16
TURKEY	T72	T32	T43	T17	T55
YUGOSLAVIA	T18	T02	T03	T03	T10

Source : calculated from Table V.

TABLE VII - Example of enrolment calculation

	Minimum					Trend					Maximum		
	1955	1970	1975	1980	1965	1970	1975	1980	1965	1970	1975	1980	
(1) Population aged 5-14 (thousands)													
Source : Table V	2252	2352	2548	2899	2252	2352	2548	2899	2252	2352	2548	2899	
(2) Enrolment ratio $\frac{W}{W}$	0,769	0,748	0,724		0,923	0,931	0,939		0,977	0,984	0,992		
(3) First level enrolments (thousands)	1860	1802	1905	2099	1860	1936	2117	2120	1960	2053	2329	2760	
Source : Table IV	0,639	0,687	0,735		0,693	0,739	0,805		0,707	0,791	0,875		
(4) Ratio R_{21}													
Source : Table IV	1100	1182	1213	1401	1100	1252	1431	1704	1100	1315	1632	2030	
(5) Second level enrolments (thousands)													
Source : $L_2(3)$ in $t-5$, $x^{(4)}$ in t	0,117	0,115	0,116		0,127	0,131	0,135		0,137	0,145	0,156		
(6) Ratio R_{32}													
Source : Table IV	124	120	138	146	124	140	154	165	124	151	192	255	
(7) Third level enrolments (thousands)													
Source : $L_3(5)$ in $t-5$, $x^{(6)}$ in t	3084	3127	3287	3514	3084	3325	3712	4320	3084	3529	4153	5052	
(8) Total enrolments (thousands)													
Source : $(3) + (5) + (7)$													

TABLE VIII - Enrolments in 1950, 1965 and 1980

Enrolments : in thousands
 Indices : Base year = 100

(1)	Enrolments					Growth indices				
	1950	1965	1980 Trend	1980 Minimum	1980 Maximum	1965/ 50	1965/ 1950 Trend	1980/ 1965 Trend	1980/ 1965 Minimum	1980/ 1965 Maximum
GERMANY										
1	6314	5607	6202	5856	6549	89	111	104	117	
2	2549	3565	5330	4615	6106	135	150	129	171	
3	135	368	1018	756	1322	273	277	205	359	
Total	9092	9540	12558	11228	13977	105	132	118	147	
AUSTRIA										
1	920	868	1168	1101	1236	94	135	127	142	
2	171	293	526	474	580	171	190	162	198	
3	21,0	48,2	123	106	142	232	252	217	291	
Total	1112	1210	1817	1681	1958	109	150	139	162	
BELGIUM										
1	967	1432	1398	1331	1464	148	98	93	102	
2	364	642	974	862	1092	176	152	134	170	
3	302	84,4	219	189	253	279	259	224	300	
Total	1361	2158	2591	232	2809	159	120	110	130	
CANADA										
1	2140	3922	4230	4134	4341	103	108	105	111	
2	382	1205	2303	2092	2520	315	191	174	209	
3	83,0	326	1312	1118	1524	393	402	343	467	
Total	2605	5453	7853	7344	8385	201	144	135	154	
DENMARK (a)										
1	443	573	980	950	1010	131	115	112	119	
2	207	276								
3	20,6	52,0	85,4	82,9	98,0	252	164	159	169	
Total	671	901	1065	1033	1098	134	118	115	122	

Note :(a) The results are not comparable with those of other countries
 (see text).

TABLE VIII - Enrolments in 1950, 1965 and 1980

Enrolments : in thousands
 Indices : Base year = 100

(2)	Enrolments					Growth indices				
	1950	1965	1980 Trend	1980 Minimum	1980 Maximum	1950	1980/55 Trend	1980/55 Minimum	1980/55 Maximum	
SPAIN										
1	2793	3524	3833	3714	3953	130	105	102	109	
2	376	1108	2281	1907	2670	205	205	172	241	
3	77,4	156	350	209	545	202	231	134	349	
Total	3246	4888	6474	5930	7169	151	132	119	147	
UNITED STATES										
1	23084	36852	44949	42815	45883	160	122	116	127	
2	6526	13000	19608	17301	22030	199	151	133	169	
3	2297	5570	11992	9323	15026	242	215	167	270	
Total	31907	55422	76449	60439	83939	174	139	125	151	
FINLAND										
1	489	544	431	409	452	111	79	75	83	
2	123	347	375	349	401	282	109	101	115	
3	120	409	60,1	50,3	70,9	341	147	123	173	
Total	624	932	866	800	924	149	93	87	99	
FRANCE										
1	5036	7302	6714	5954	7474	145	92	82	102	
2	1099	3249	4853	4193	5559	296	149	129	171	
3	187	524	1243	1012	1506	290	237	193	287	
Total	5322	11075	12910	11159	14539	175	116	101	131	
GREECE										
1	953	1004	942	954	1030	105	94	85	103	
2	...	456	740	386	1159	216	...	...	...
3	16,0	66,0	333	125	657	413	505	199	995	
Total	...	1526	2023	1365	2846	129	...	...	...

TABLE VIII - Enrolments in 1950, 1965 and 1980

Enrolments : in thousands
 Indices : Base year = 100

(3)	Enrolments					Growth indices				
	1950	1965	1970 Trend	1970 Minimum	1970 Maximum	1955/50	1965/65 Trend	1965/65 Minimum	1965/65 Maximum	
IRELAND										
1	452	495	504	579	610	107	120	117	123	
2	149	210	303	263	345	146	139	121	159	
3	...	17,1	37,9	29,4	47,4	...	221	172	277	
Total	...	730	935	871	1003	...	129	119	137	
ITALY										
1	5572	5856	6537	5299	7776	105	112	90	133	
2	1114	3060	6206	4889	7634	275	203	160	249	
3	241	405	931	632	1370	168	237	156	338	
Total	5927	9321	13704	10920	16790	135	147	116	190	
JAPAN										
1	11416	10913	9825	6727	12924	95	90	62	119	
2	7268	11040	9094	5503	13558	152	82	50	123	
3	400	1085	1784	954	2978	271	164	88	274	
Total	19094	23039	20593	13194	29460	121	90	57	128	
LUXEMBOURG										
1	32,5	43,0	55,3	51,3	59,3	132	129	119	139	
2	8,9	12,0	18,3	14,9	21,9	135	153	124	123	
3	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	...
NORWAY										
1	320	412	411	303	430	129	100	93	107	
2	90,0	248	332	294	371	276	134	119	150	
3(a)	...	28,0	72,3	60,2	85,9	...	250	209	297	
Total	...	609	815	737	896	...	118	107	130	

Note :

(a) The results are not comparable with those of other countries
 (see text).

TABLE VIII - Enrolments in 1950, 1965 and 1980

Enrolments : in thousands
Indices : Base year = 100

(4)	Enrolments						Growth indices			
	1950	1965	1980 Trend	1980 Minimum	1980 Maximum	1965/50	1980/65 Trend	1980/65 Minimum	1980/65 Maximum	
NETHERLANDS										
1	1557	1860	2429	2099	2760	119	131	113	148	
2	560	1100	1704	1401	2038	196	155	127	185	
3	49,8	124	195	144	255	249	157	116	206	
Total	2167	3084	4328	3614	5053	142	140	118	164	
PORTUGAL										
1	645	904	1093	1007	1179	140	121	111	130	
2	89,9	316	653	568	745	352	207	180	236	
3	15,5	36,0	42,5	20,4	69,2	232	118	57	192	
Total	750	1256	1789	1595	1993	167	142	127	159	
UNITED KINGDOM										
1	4329	5356	6471	5019	7922	111	121	94	148	
2	2152	3450	5757	4409	7261	160	167	128	210	
3	180	432	816	602	1075	240	189	139	249	
Total	7161	9238	13044	10030	16258	129	141	109	176	
SWEDEN										
1	651	878	1382	1299	1465	135	157	148	167	
2	161	282	375	233	530	175	133	83	188	
3	21,0	77,6	143	84,3	220	370	184	109	284	
Total	833	1238	1900	1616	2215	149	153	131	179	
TURKEY										
1	1617	3924	7690	6773	8606	243	196	173	219	
2	143	730	2129	1469	2887	510	292	201	395	
3	24,0	98,7	163	32,8	361	411	165	33	366	
Total	1784	4753	9982	8275	11854	266	210	174	249	
YUGOSLAVIA										
1	1854	2984	4074	3820	4328	161	137	128	145	
2	275	614	1231	1079	1393	223	200	176	227	
3	55,0	185	756	243	1377	336	409	131	744	
Total	2184	3783	6061	5142	7098	173	160	136	188	

TABLE IX - Deviation between minimum and maximum estimates in 1980
(percentage of the minimum estimate)

	1st level	2nd level	3rd level	Total
GERMANY	12	32	75	24
AUSTRIA	12	22	34	16
BELGIUM	10	27	34	18
CANADA	5	20	36	14
DENMARK (a)	6		6	6
SPAIN	6	40	161	23
UNITED STATES	10	27	61	21
FINLAND	11	15	41	14
FRANCE	26	33	49	30
GREECE	21	200	426	108
IRELAND	5	32	61	15
ITALY	47	56	117	55
JAPAN	92	146	212	123
LUXEMBOURG	16	47	...	...
NORWAY	15	26	43(a)	22(a)
NETHERLANDS	31	45	77	39
PORTUGAL	17	31	239	25
UNITED KINGDOM	58	65	79	62
SWEDEN	13	127	161	37
TURKEY	27	97	1001	43
YUGOSLAVIA	13	29	467	38

Note : The deviation is not comparable with that of the other countries.

Source : Calculated from Table VIII.

TABLE X - Enrolment ratios in 1950, 1965, 1980
(as a percentage of the age group)

(1)	Secondary			Primary & secondary			Higher			Total		
	1950	1965	1980	1950	1965	1980	1950	1965	1980	1950	1965	1980
GERMANY	Min.	49	75				19					62
	Trend.	33	47	56	76	77	83	4	9	24	50	59
	Max.		65				91		31			77
AUSTRIA	Min.	37					92		10			59
	Trend.	18	30	41	72	75	88	4	9	22	56	59
	Max.		45				94		25			79
BELGIUM	Min.	58					102		24			81
	Trend.	31	45	65	77	95	110	5	15	28	57	70
	Max.		73				119		32			95
CANADA	Min.	47					92		10			80
	Trend.	17	32	52	72	85	96	7	24	56	56	86
	Max.		56				101		65			92
DENMARK	Min.	...					76		23			61
	Trend.	34	35	...	65	74	70	7	14	23	52	66
	Max.						81		24			68
SPAIN	Min.	33					64		6			51
	Trend.	7	21	40	43	57	70	3	7	13	32	46
	Max.		16				75		20			62
UNITED STATES	Min.	40					89		15			70
	Trend.	30	36	45	85	82	94	20	41	50	69	86
	Max.		51				101		73			91

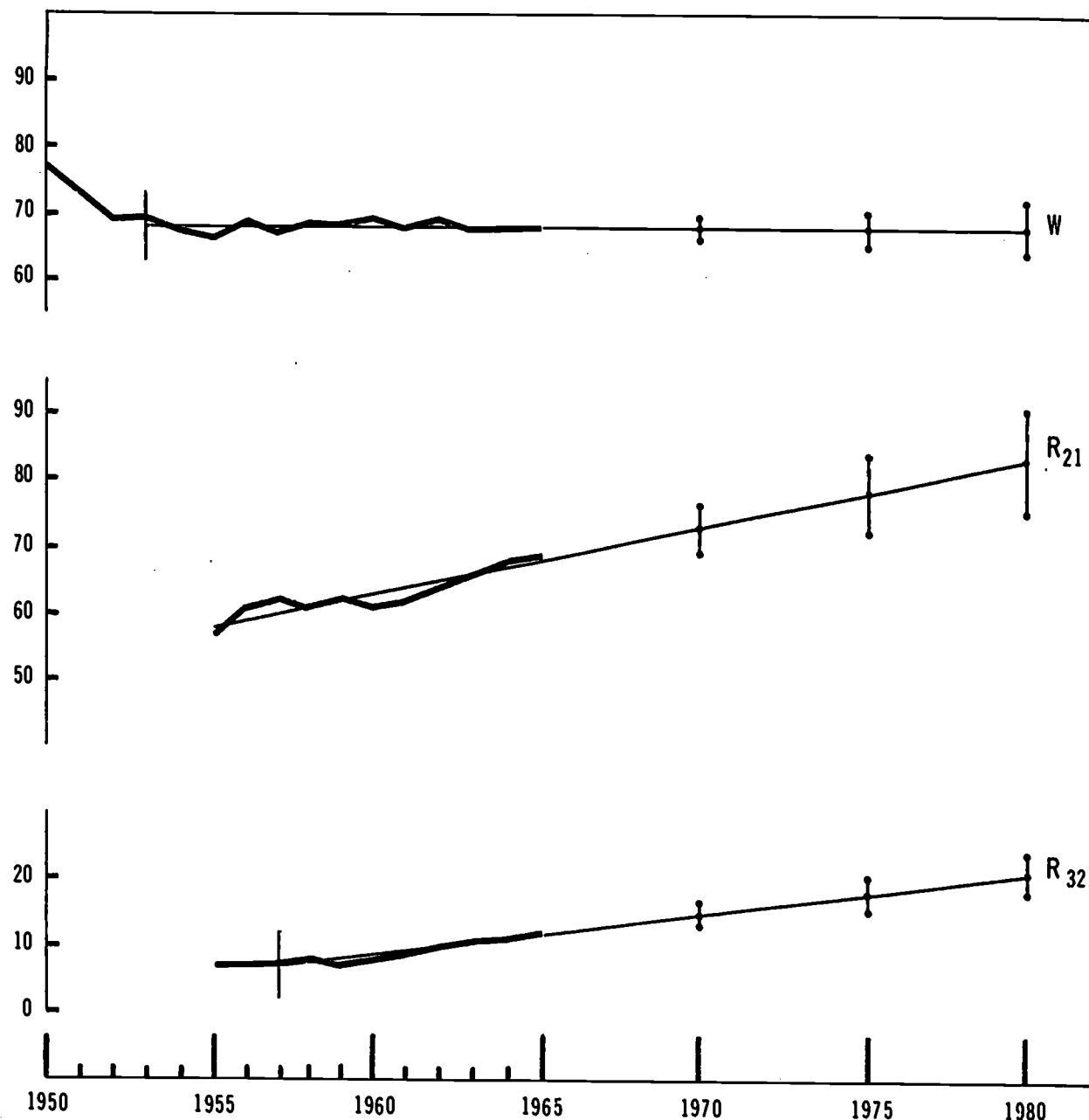
TABLE X - Enrolment ratios in 1950, 1965, 1980 (continued)
(as a percentage of the age group)

(2)	Secondary			Primary & secondary			Higher			Total		
	1950	1965	1980	1950	1965	1980	1950	1965	1980	1950	1965	1980
FINLAND				46		65				13		
Trend.	19	37	49	50	66	70	4	12	15	46	55	56
Max.				53		74				12		60
Min.				51		80				25		67
FRANCE				39	59	87	92	6	17	31	55	73
Trend.	19	39	59	74	97	103				37		97
Max.				68								
GREECE				27		59				19		48
Trend.	...	...	50	...	...	79	2	11	48	...	...	71
Max.			81				107		91			101
IRELAND				43		85				14		70
Trend.	29	44	50	79	92	92	...	10	14	...	79	76
Max.				57		98			10		91	
ITALY				55		75				15		61
Trend.	14	37	70	55	71	93	6	11	24	43	59	70
Max.				85		113				34		95
JAPAN				33		47				12		39
Trend.	42	55	54	70	79	72	5	12	23	55	62	61
Max.			81				101		39		95	
LUXEMBOURG				26	32	73	78	92	...	...	...	...
Trend.	24	26		38		90			...	...	...	...
Max.												

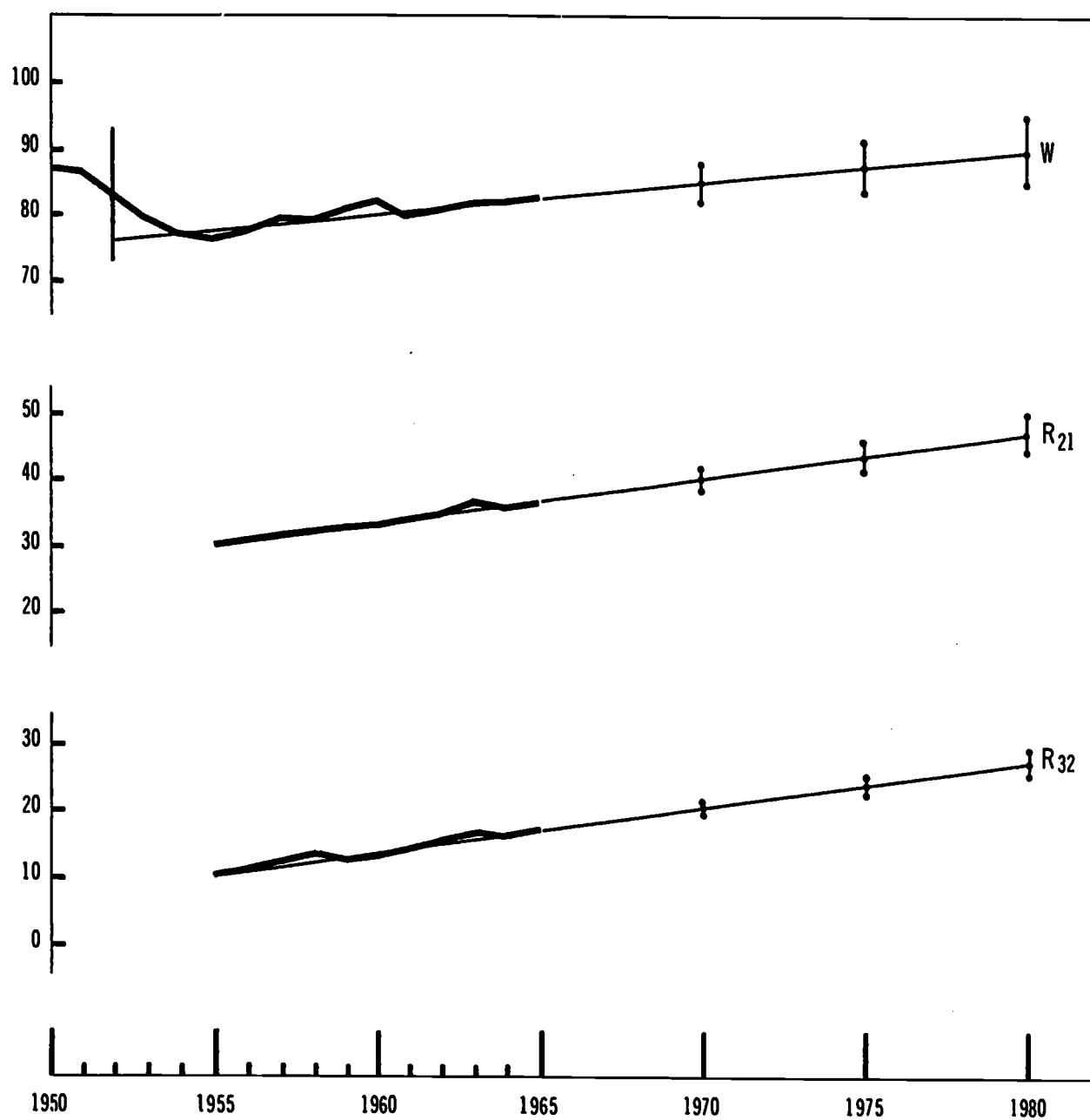
TABLE X - Enrollment ratios in 1950, 1965, 1980 (continued)
 (as a percentage of the age group)

(3)	Secondary			Primary & secondary			Higher			Total	
	1950	1965	1980	1950	1965	1980	1950	1965	1980	1950	1965
NORWAY Min.		47				58				20	
NORWAY Trend.	22	40	53	60	71	75	... .	11	24	... .	58
NORWAY Max.		59				82			28		63
HOLLAND Min.		55				85					69
HOLLAND Trend.	34	49	67	92	86	101	6	14	17	64	71
HOLLAND Max.		80				117			22		95
PORTUGAL Min.		31				55				3	
PORTUGAL Trend.	6	20	35	31	49	51	2	5	6	24	40
PORTUGAL Max.		40				67			9		55
ROYAL KINGDOM Min.		45				64				14	
ROYAL KINGDOM Trend.	32	43	59	69	72	82	5	12	20	52	59
ROYAL KINGDOM Max.		75				102			25		86
SWEDEN Min.		20				92				15	
SWEDEN Trend.	19	24	32	56	69	94	5	13	25	43	54
SWEDEN Max.		45				107			40		92
TURKEY Min.		15				52				1	
TURKEY Trend.	3	11	21	24	41	61	1	4	4	19	35
TURKEY Max.		29				72			8		50
YUGOSLAVIA Min.		29				95				13	
YUGOSLAVIA Trend.	8	17	33	42	66	92	3	14	10	33	55
YUGOSLAVIA Max.		37				100			73		93

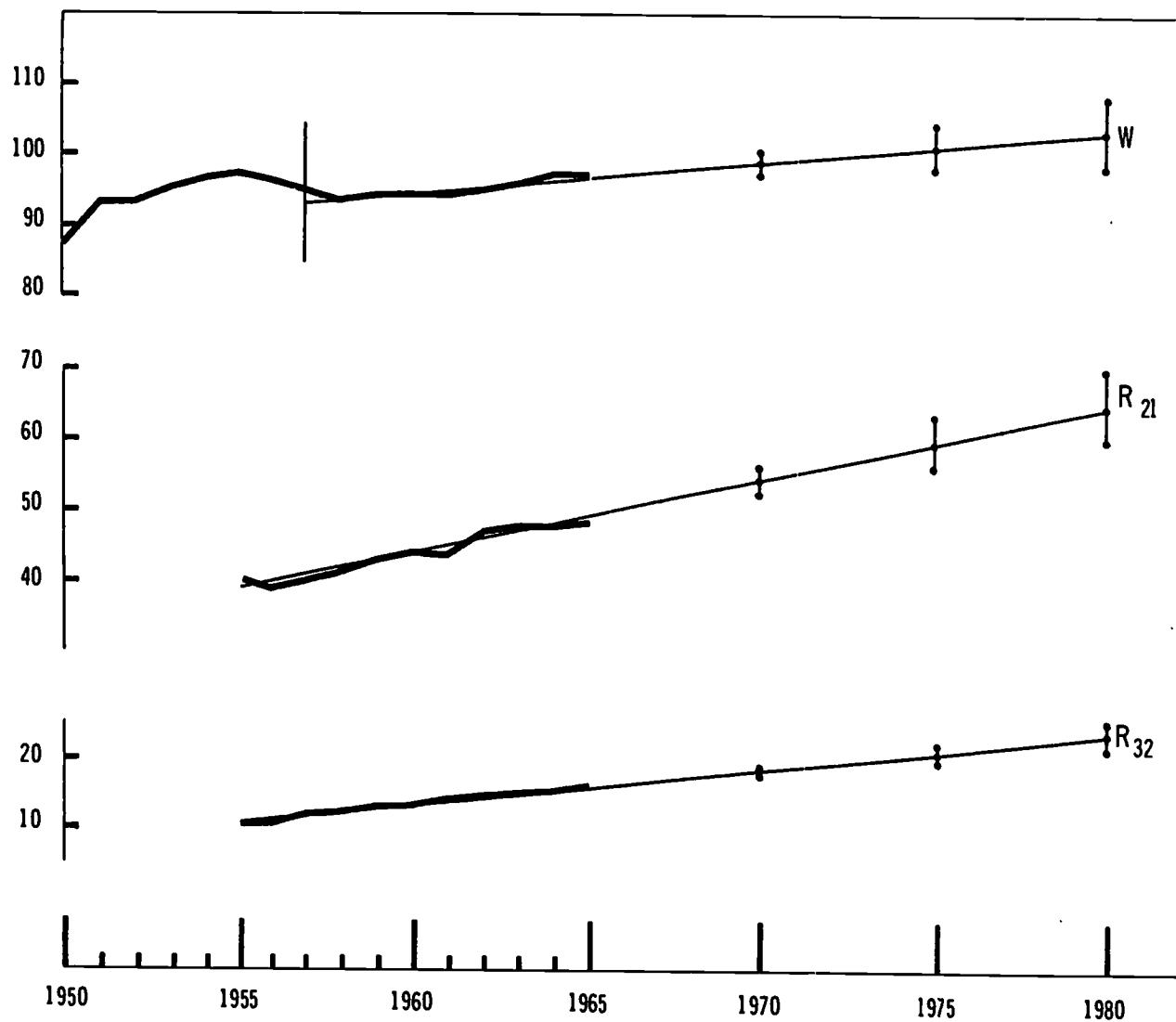
Graphique 1 - Graph 1
ALLEMAGNE - GERMANY



Graphique 2 - Graph 2
AUTRICHE - AUSTRIA

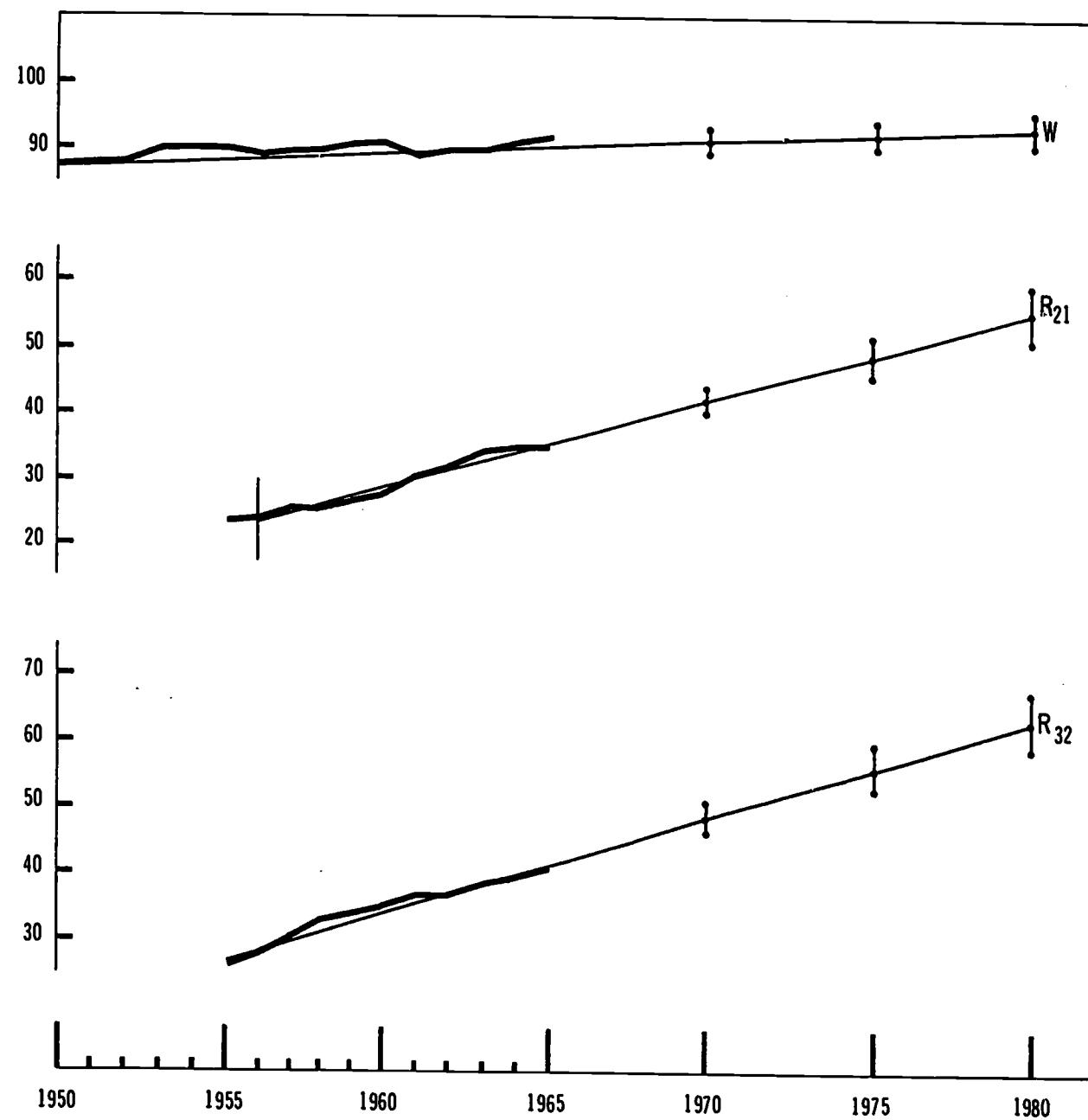


Graphique 3 - Graph 3
BELGIQUE - BELGIUM

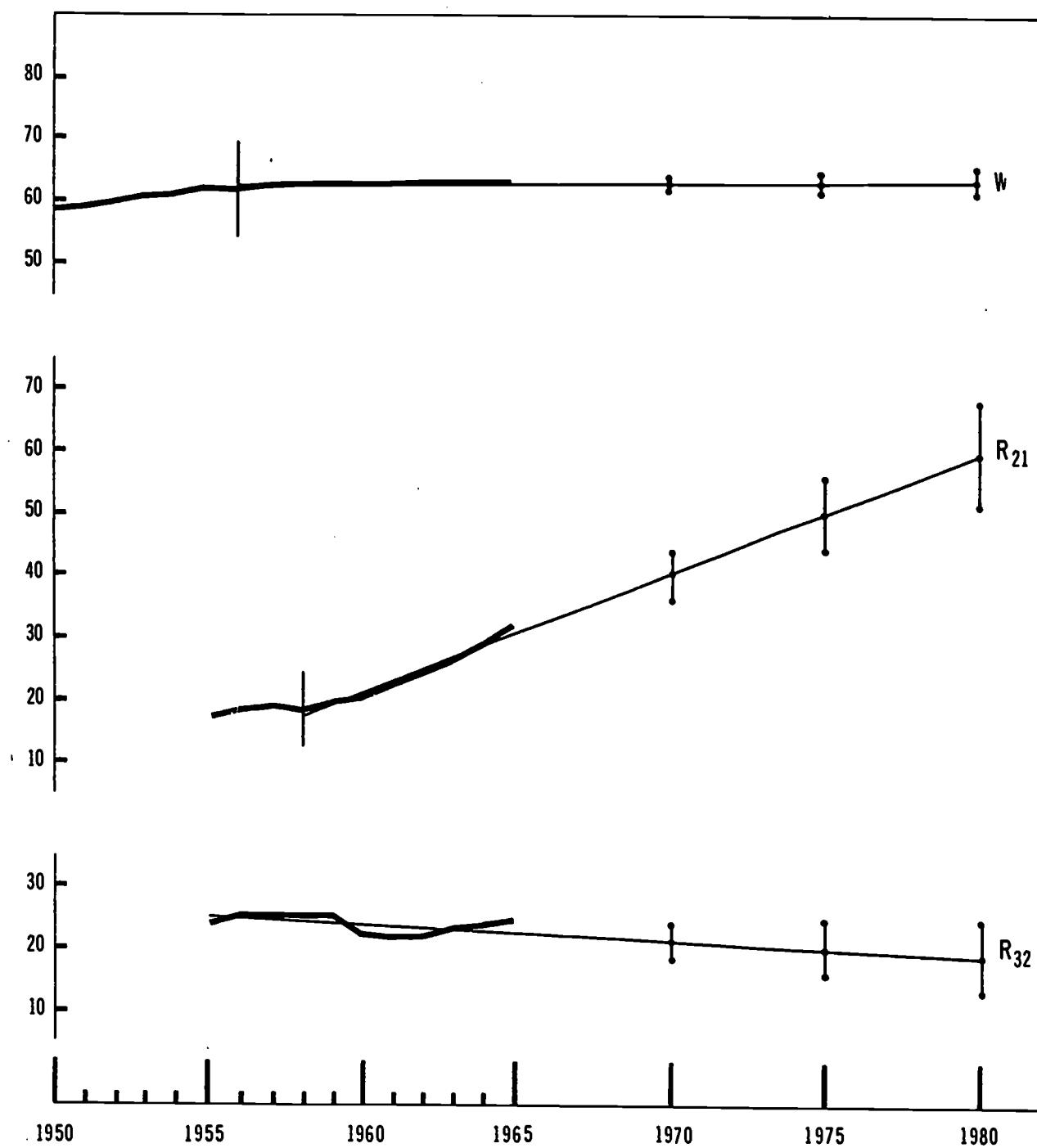


Graphique 4 - Graph 4

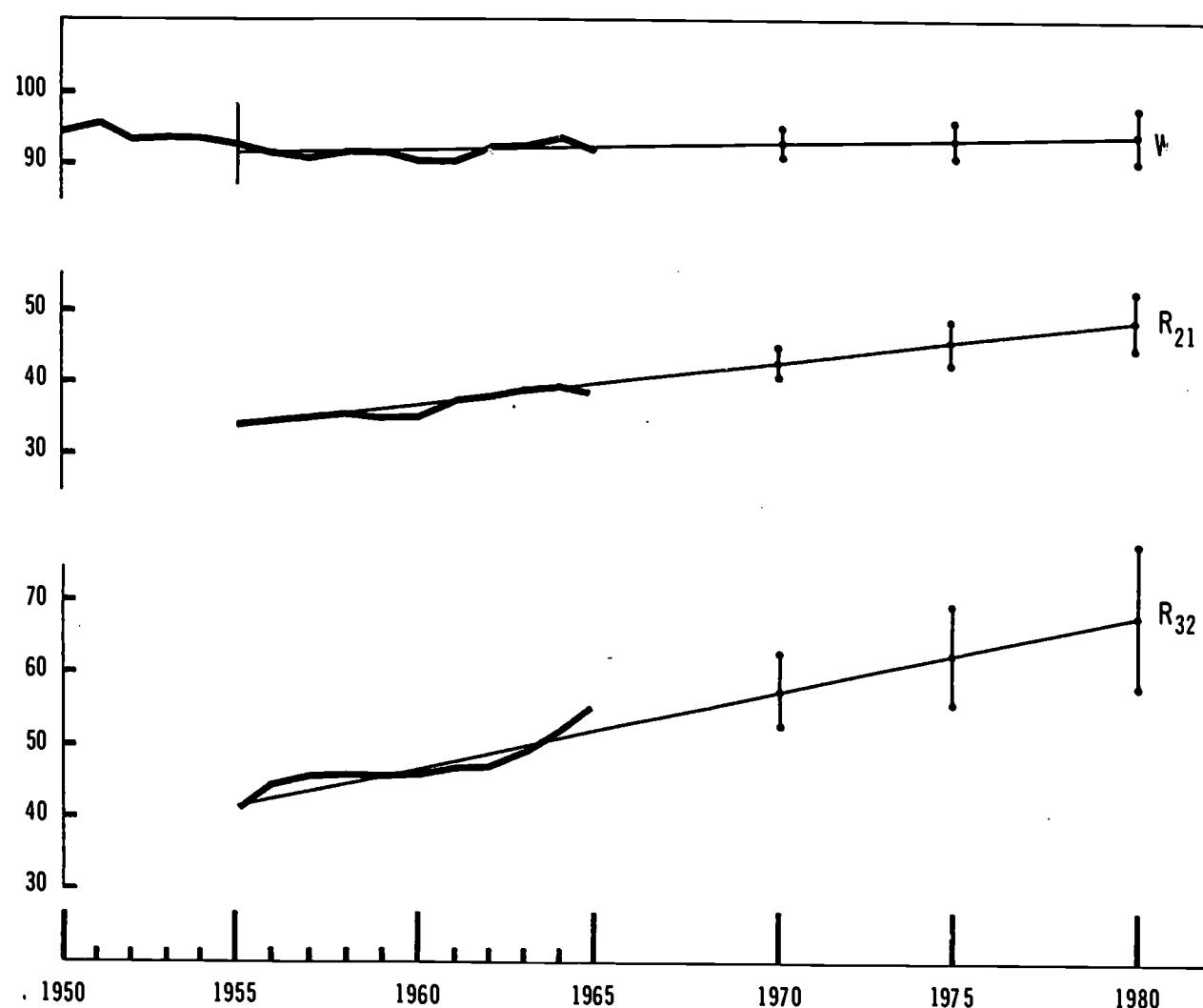
CANADA



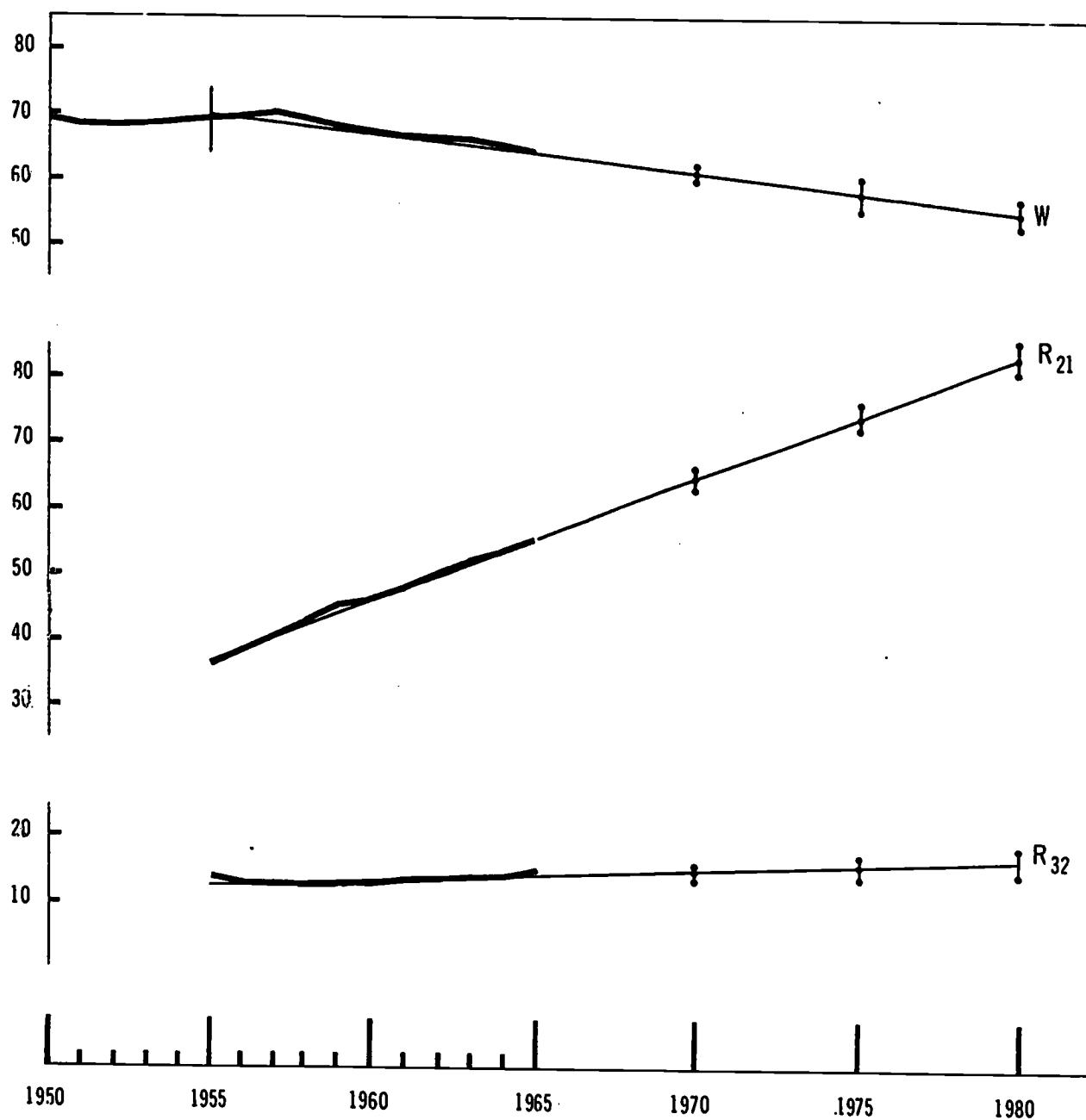
Graphique 5 - Graph 5
ESPAGNE - SPAIN



Graphique 6 - Graph 6
ETATS-UNIS - UNITED STATES

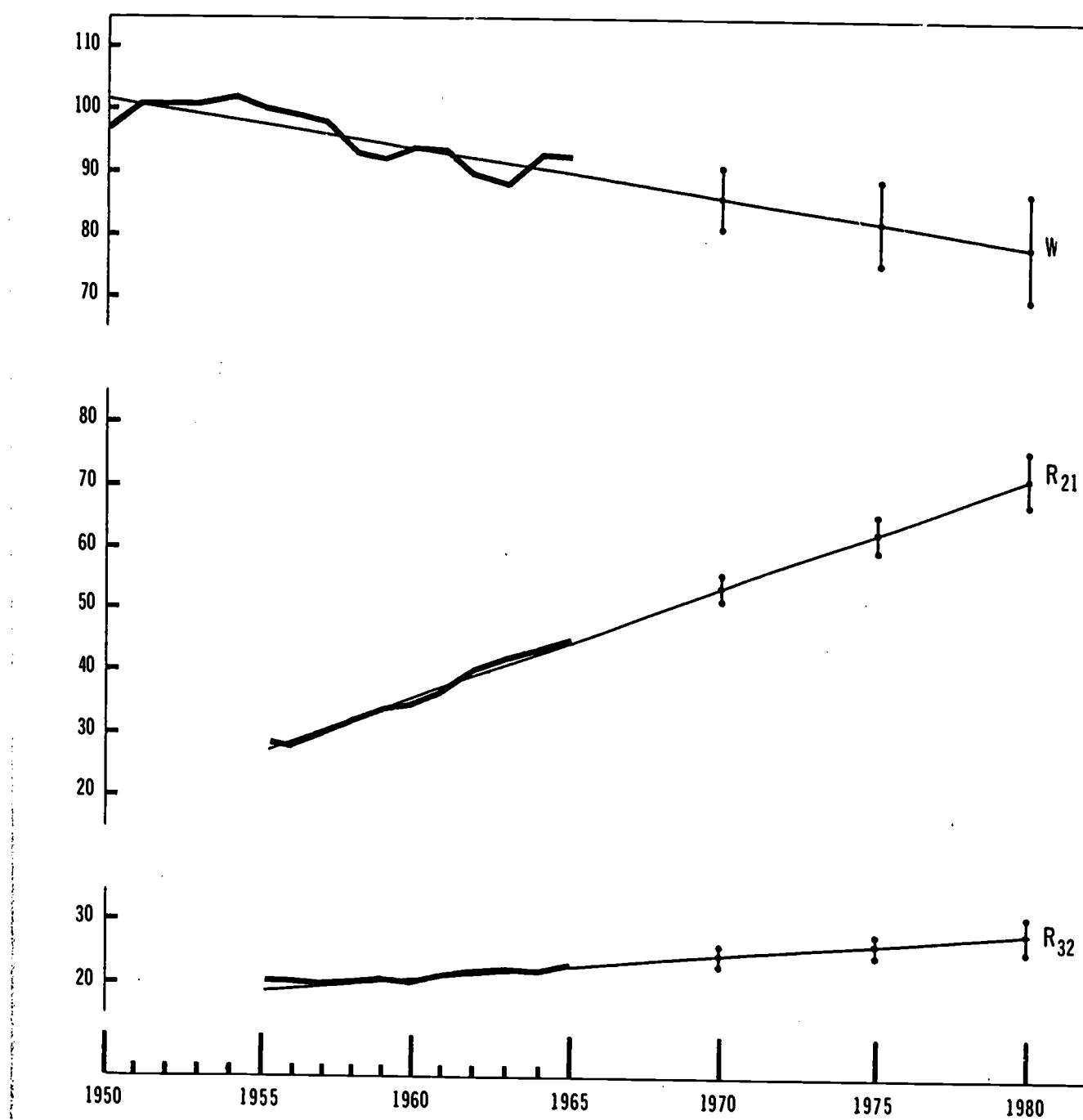


Graphique 7 - Graph 7
FINLANDE - FINLAND



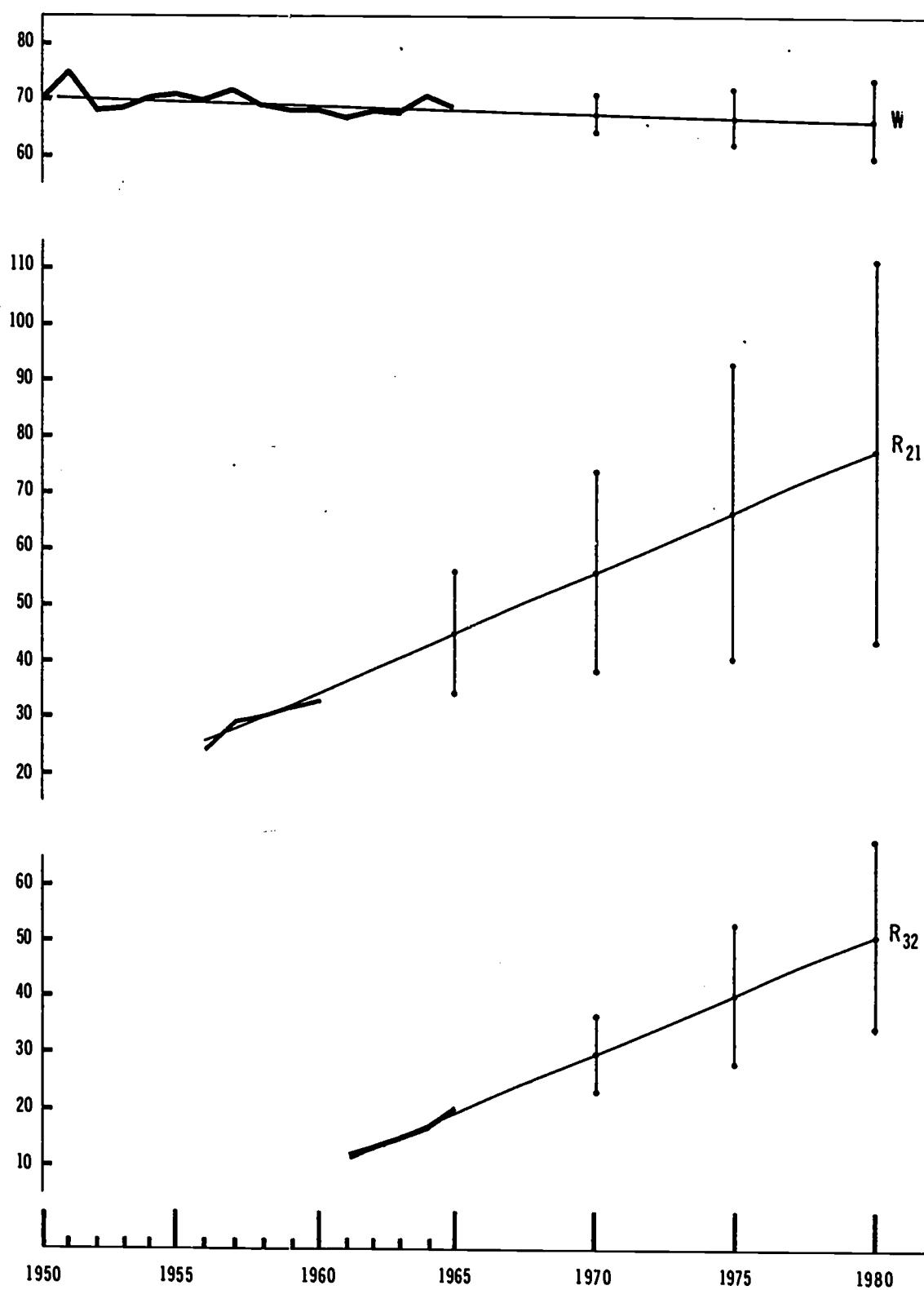
Graphique 8 - Graph 8

FRANCE

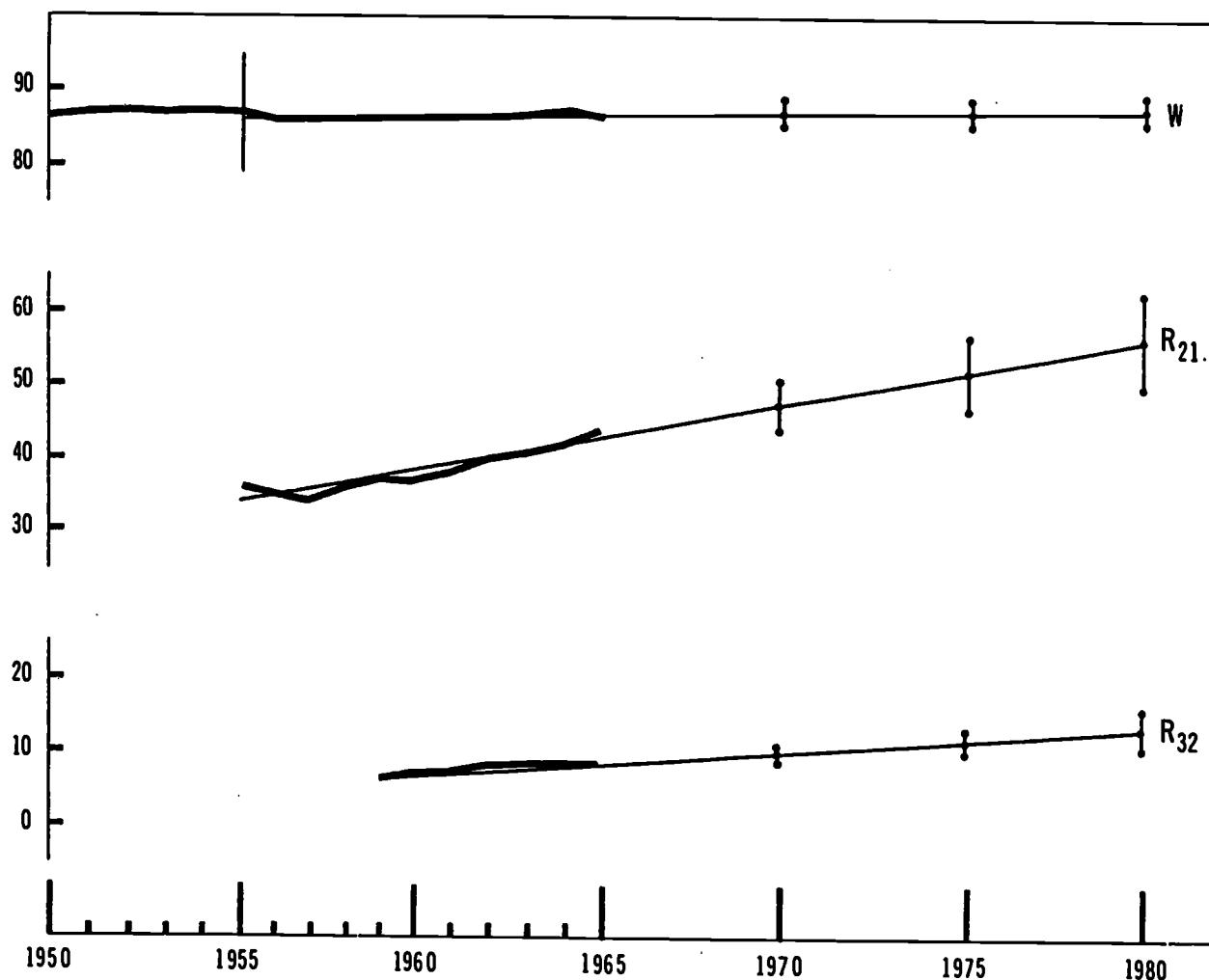


Graphique 9 - Graph 9

GRECE - GREECE

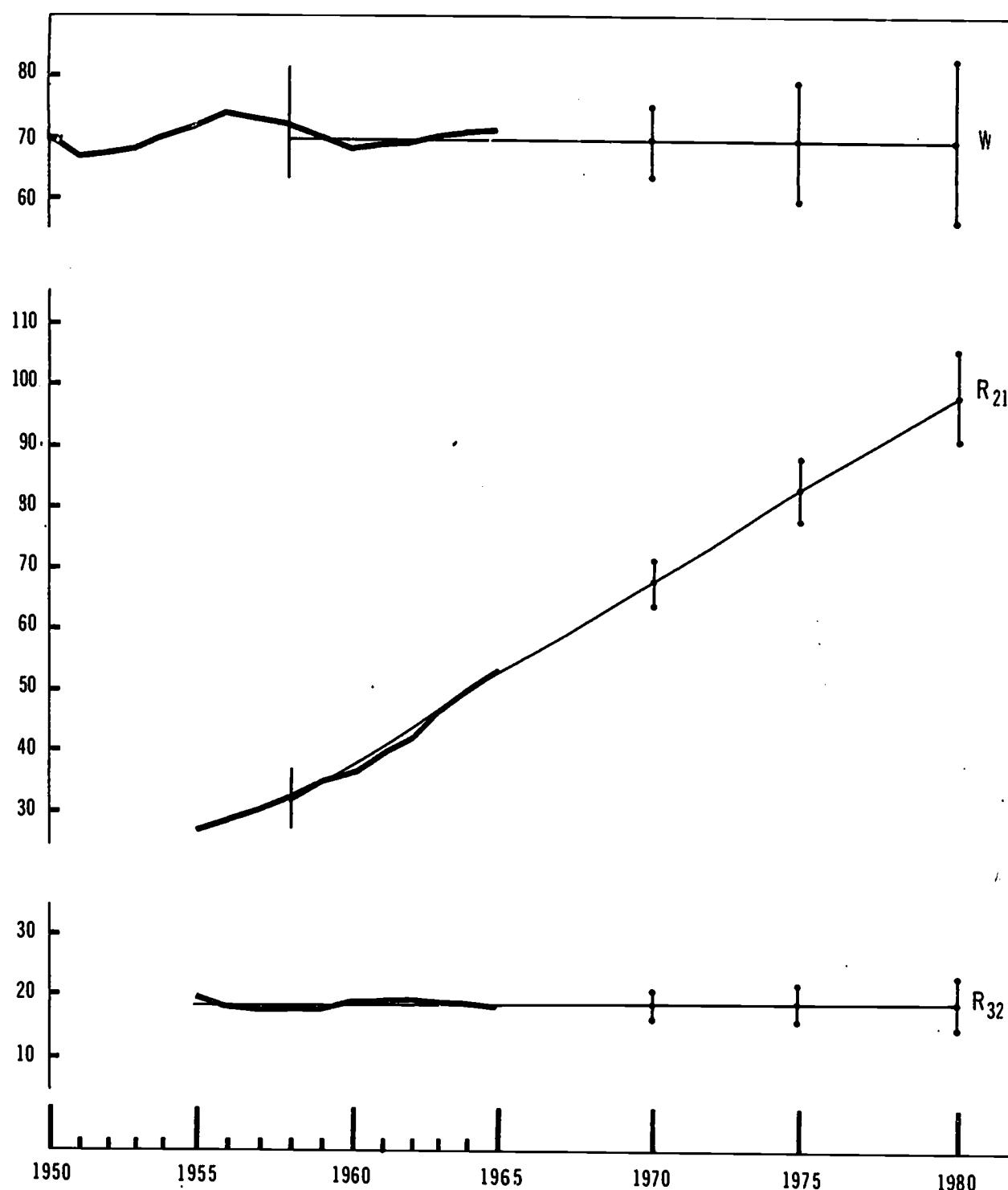


Graphique 10 - Graph 10
IRLANDE - IRELAND



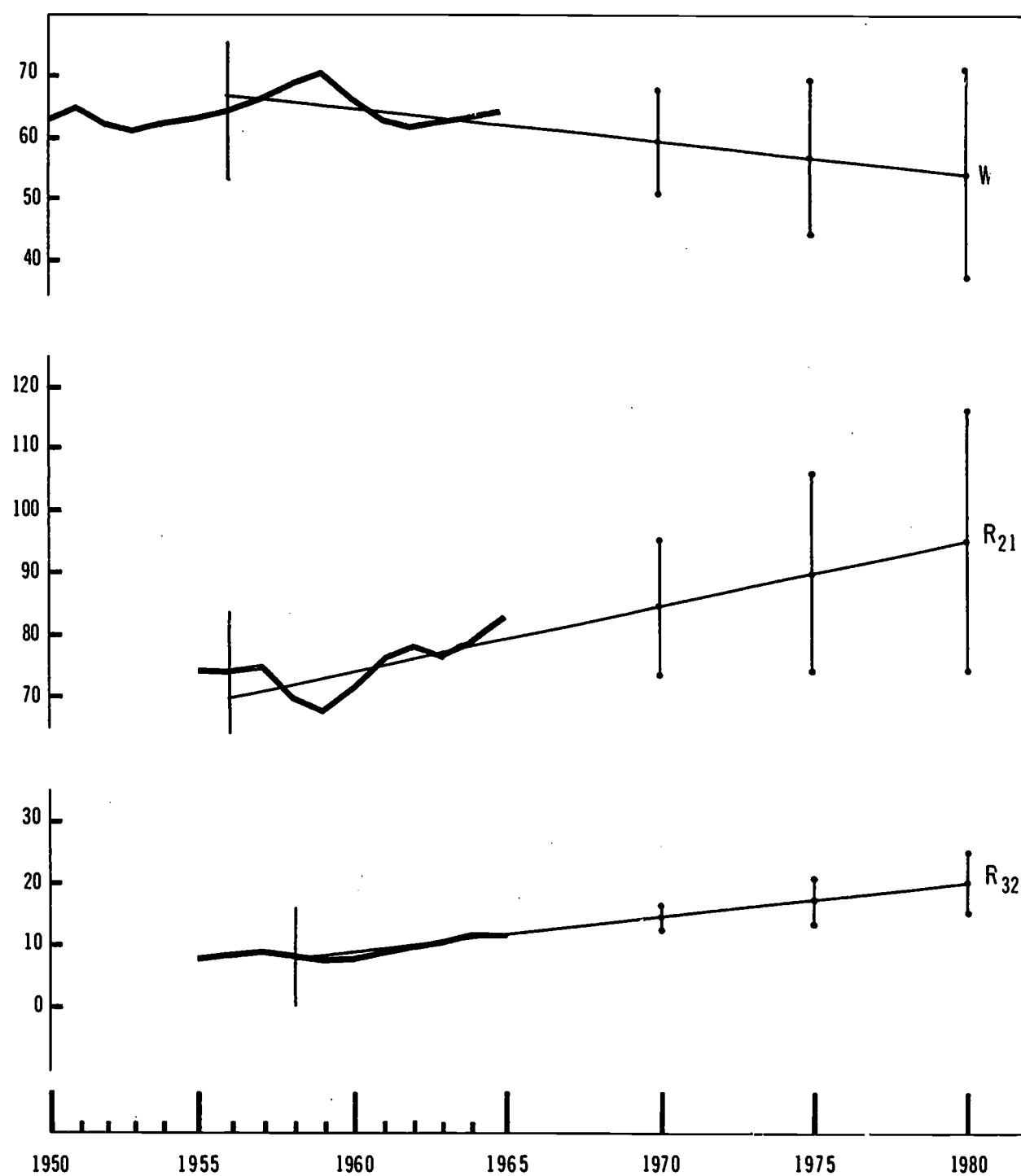
Graphique 11 - Graph 11

ITALIE - ITALY

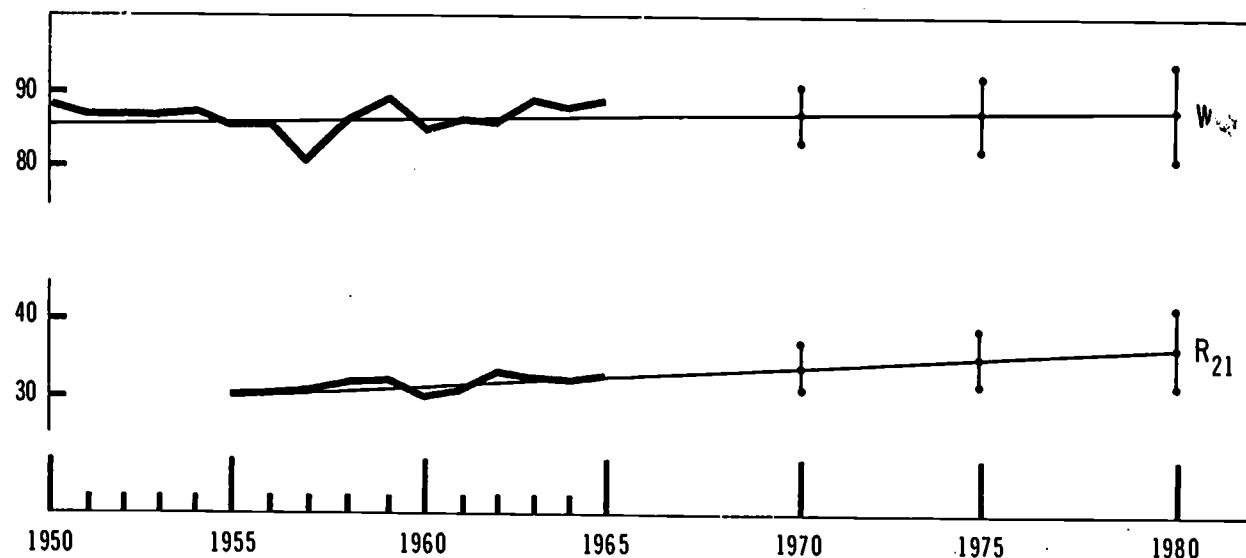


Graphique 12 - Graph 12

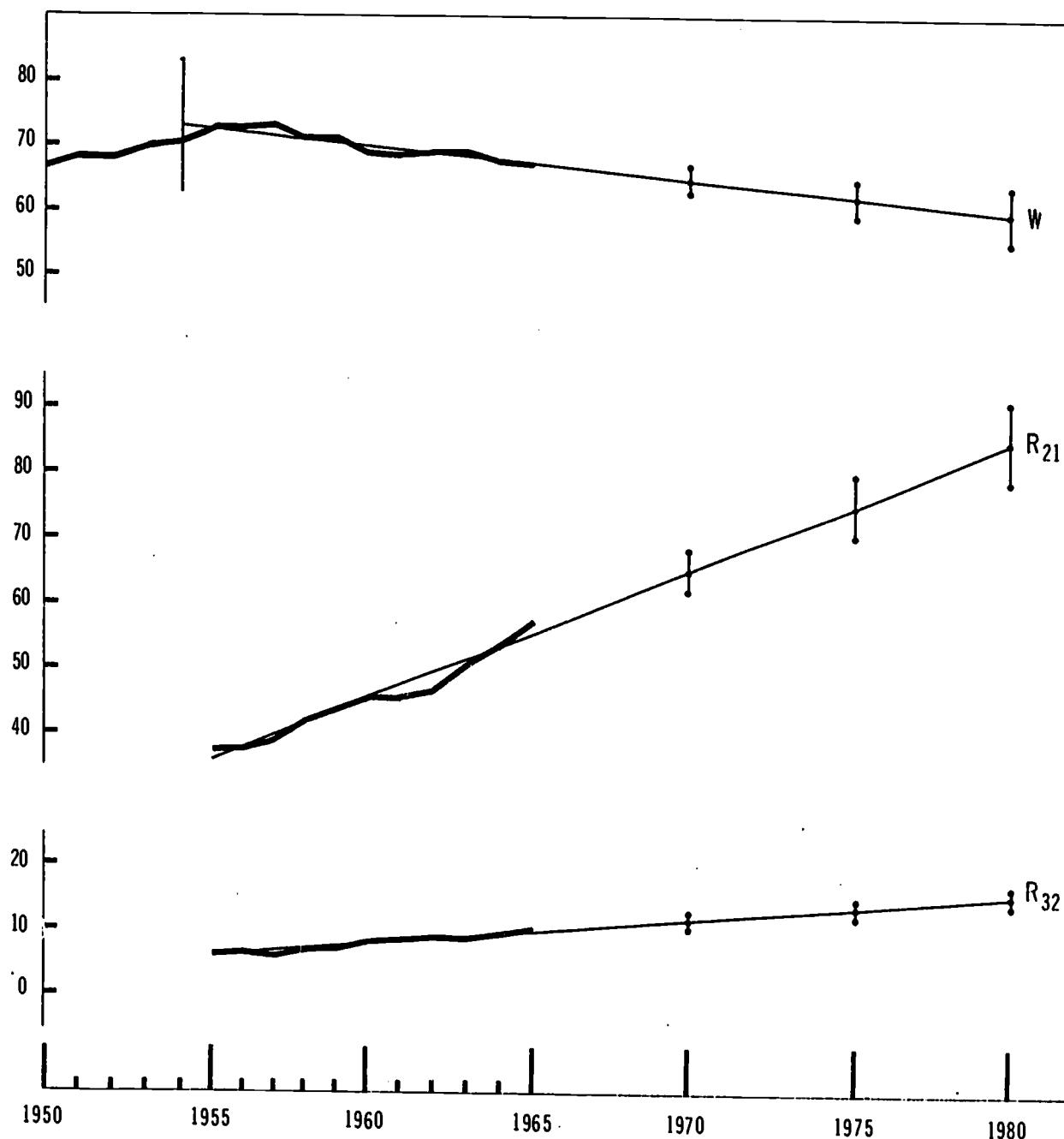
JAPON - JAPAN



Graphique 13 - Graph 13
LUXEMBOURG

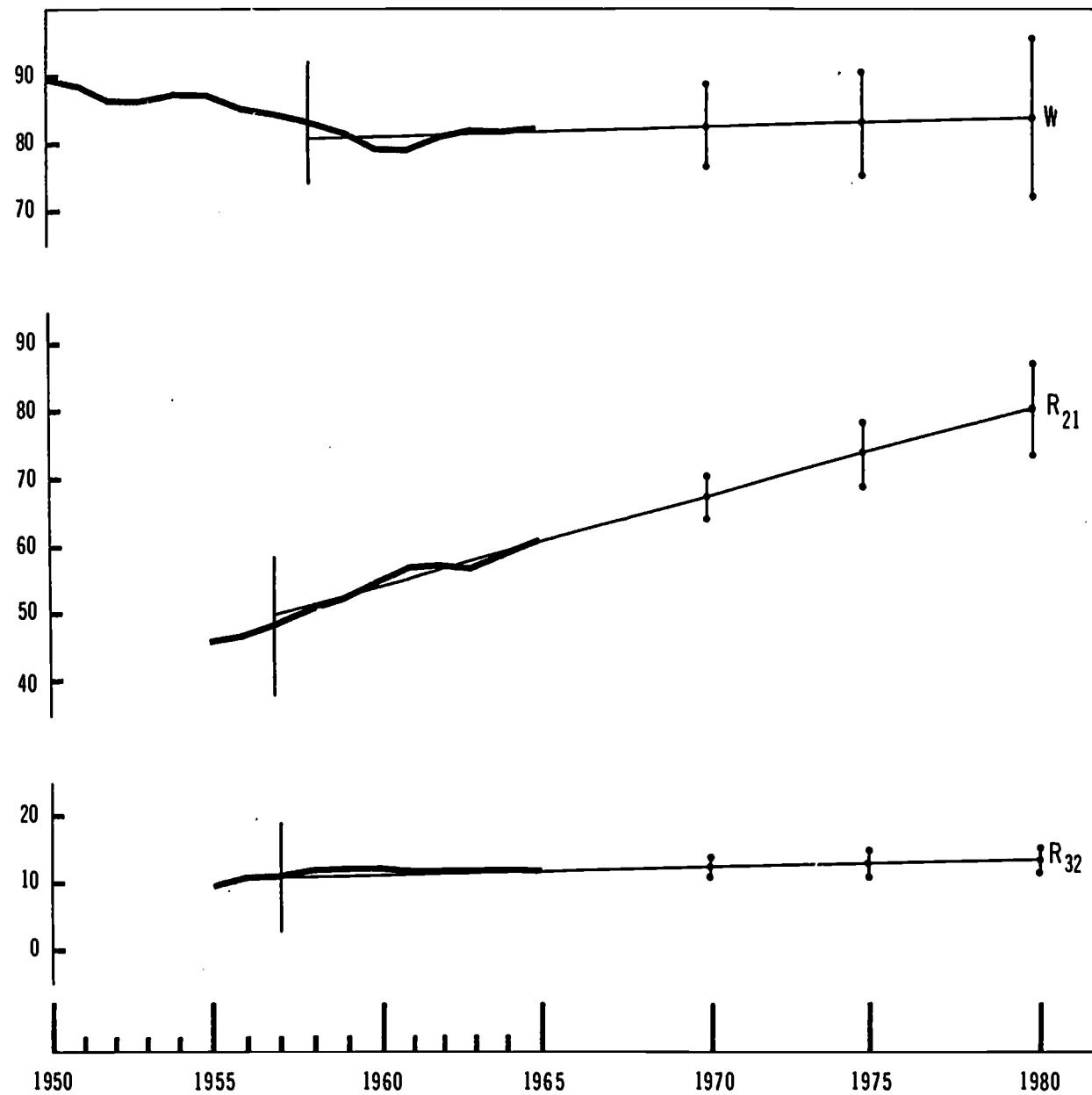


Graphique 14 - Graph 14
NORVEGE - NORWAY



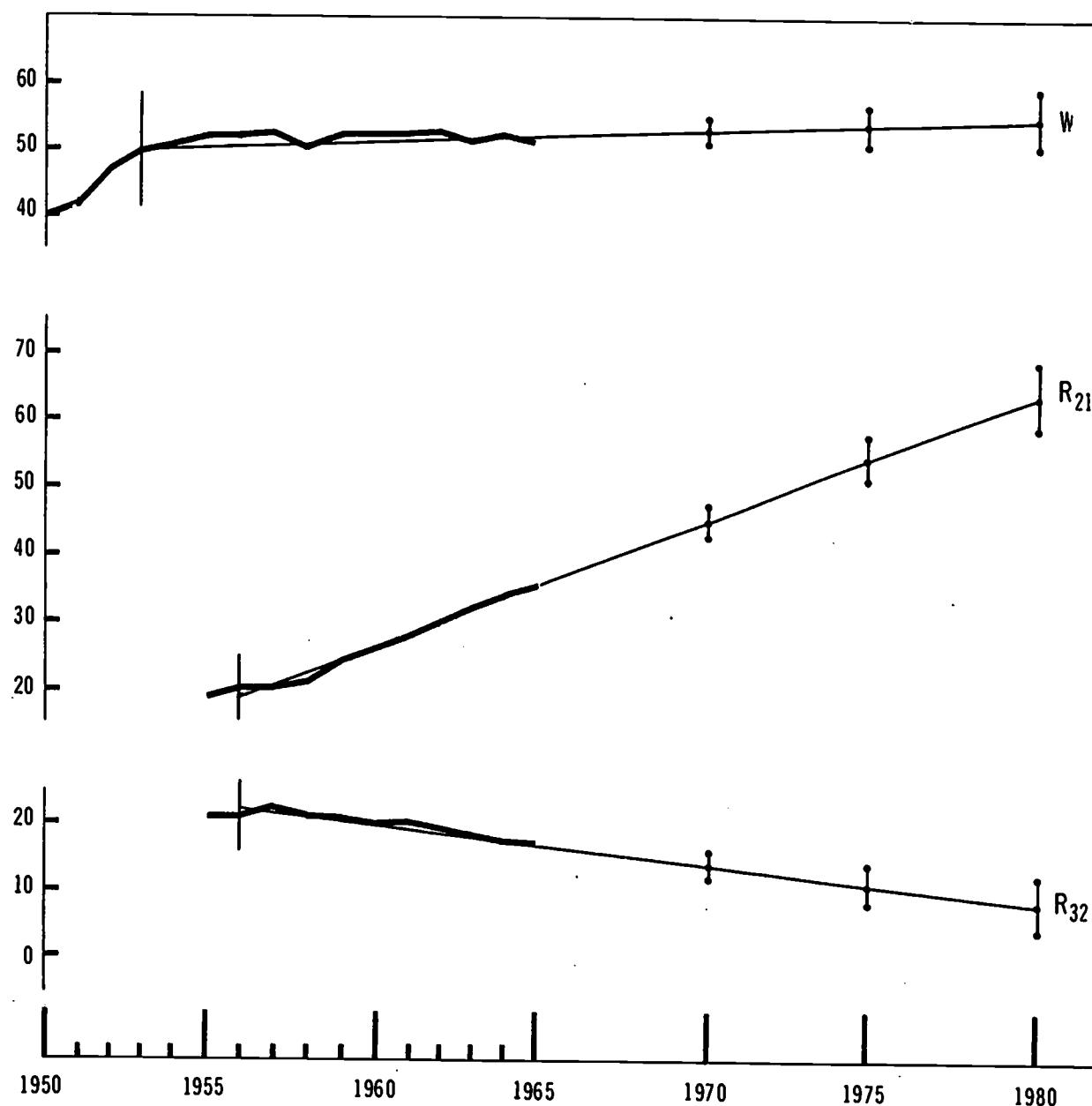
Le rapport R_{32} est calculé en tenant compte seulement des effectifs universitaires.
Ratio R_{32} is calculated on the basis of university students only.

Graphique 15 - Graph 15
PAYS-BAS - NETHERLANDS

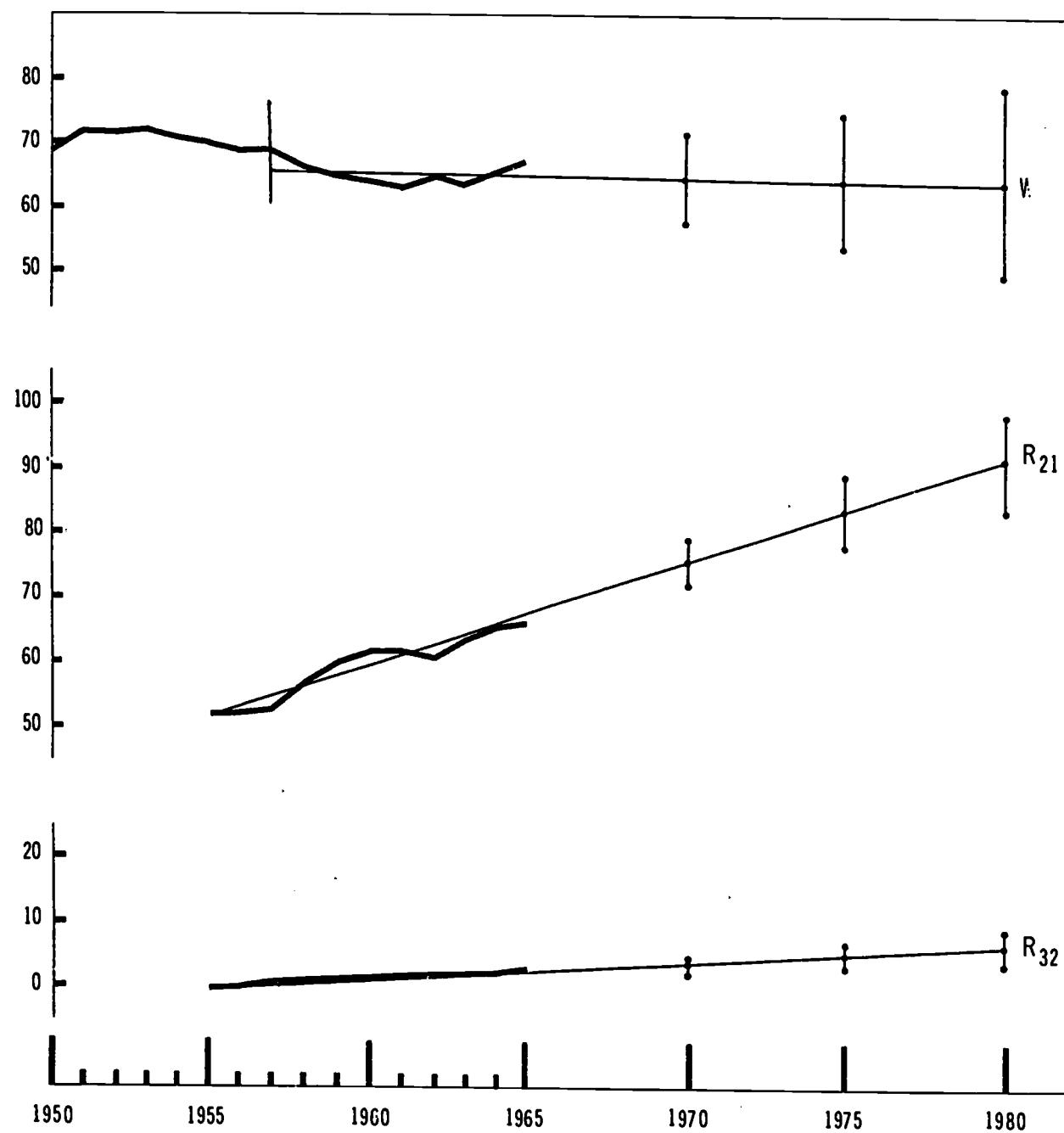


Graphique 16 - Graph 16

PORTUGAL

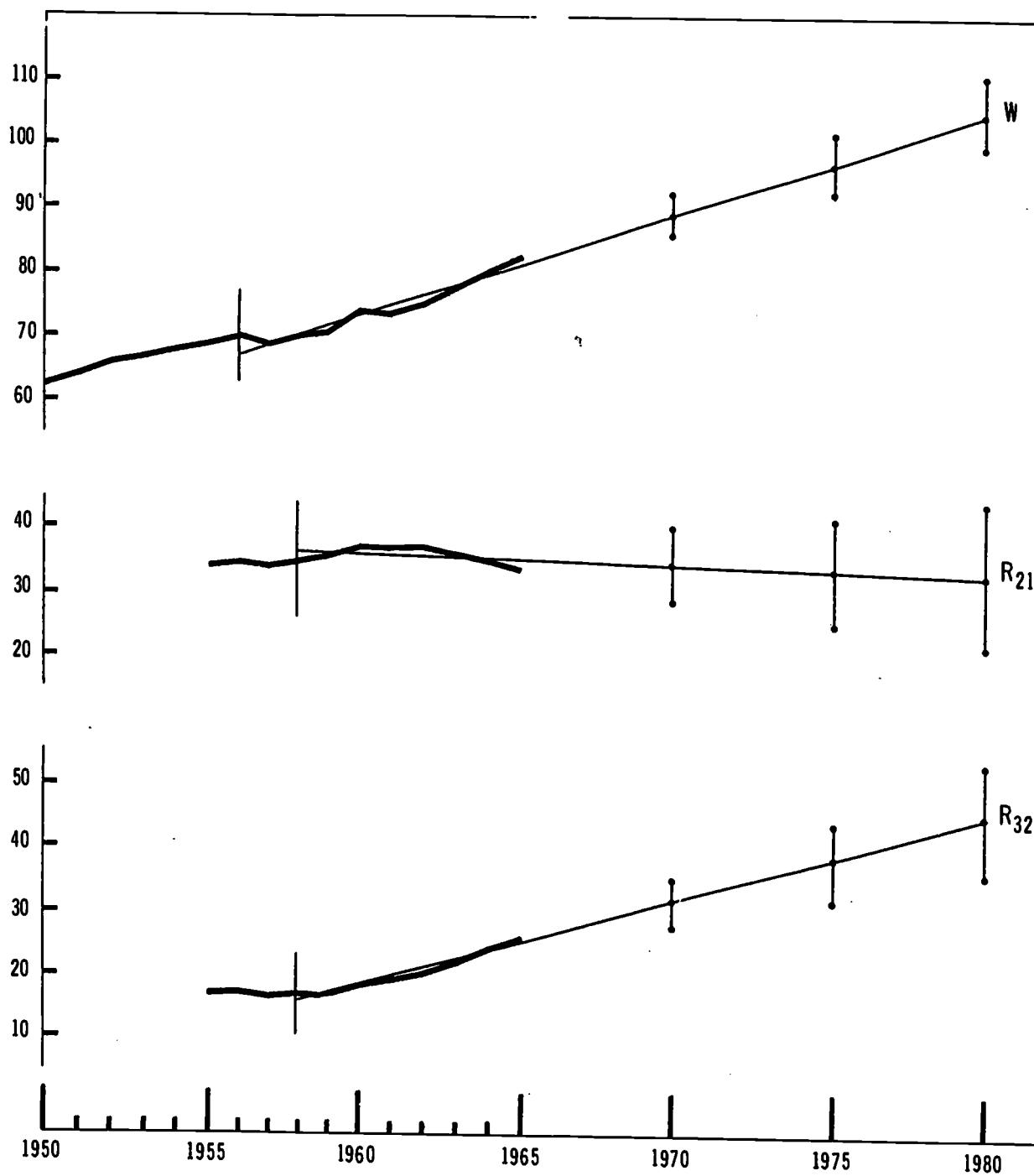


Graphique 17 - Graph 17
ROYAUME-UNI - UNITED KINGDOM

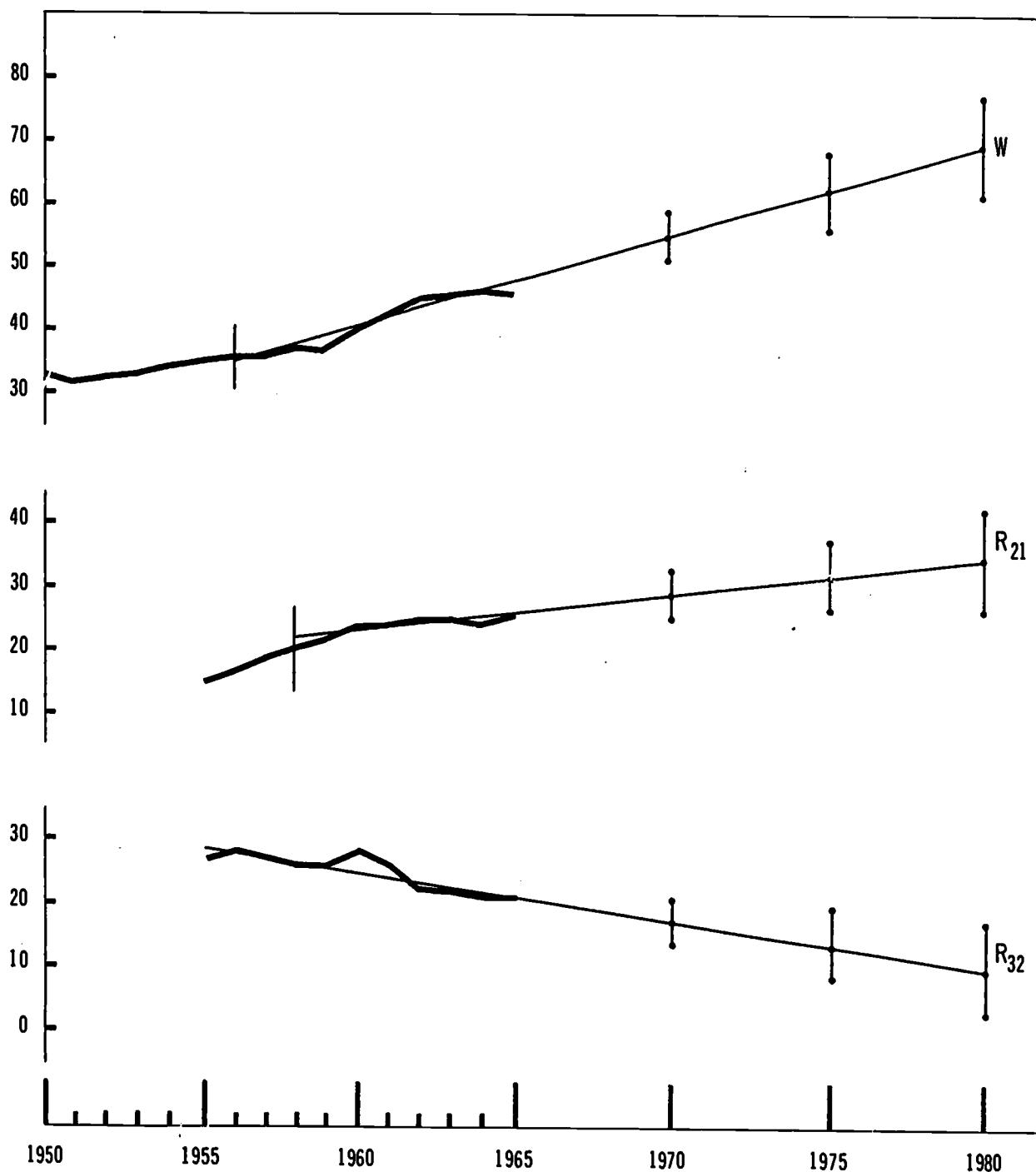


Graphique 18 - Graph 18

SUEDE - SWEDEN



Graphique 19 - Graph 19
TURQUIE - TURKEY



Graphique 20 - Graph 20
YUGOSLAVIE - YUGOSLAVIA

